The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[*The* MINING JOURNAL *is Registered at the General Post Office as a Newspaper and for Transmission Abroad.*]

No. 2396.—VOL. LI. LONDON, SATURDAY, JULY 23, 1881. [WITH SUPPLEMENT.] PRICE ..... SIXPENCE PER ANNUM, BY POST £1 6s

MR. JAMES H. CROFTS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Banks, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.

BUSINESS negociated in Stocks and Shares not having a general market value.

Every Friday a general and reliable List issued (a copy of which will be forwarded regularly on application), containing closing prices of the week.

MINES INSPECTED.

BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTELL.

SPECIAL DEALINGS in the following, or part:—

50 Almada, 6s.	50 Last Chance, 20s.	30 Richmond, £16.
20 Carnarvon Cop., 19s	50 Leadhills, £1 15s.	10 Roman Grav., £11⅞.
55 Colorado, £2¾.	50 Marke Valley, £1 3s 9	30 So. Devon, £2.
25 Devon Con., £8 15s	25 Morfa Du, 15s.	25 S. Indian Gold, £1 17 6
25 Derwent, £1 5s.	50 North D'Eresby.	10 S. Condurrow, £10.
50 East Crebor, 2s. 6d.	100 Nouv. Monde, £1 1s 3	50 South Darren, £1 5s.
50 East Caradon, 18s.	50 N.Penstruthal, £1 8s 9 (call paid)	50 So. E.Wynaad, £1 6 3
20 E. Roman Grav., 15s		50 S. Penstruthal. 9s, c p
30 East Van, £1 5s.	40 N. Wye Valley, 11s 3	100 Tanker. Gt. Con.,11s
100 E. W. Rose, off. wntd.	30 Pandora, 11s.	50 United Van Consols and Glyn, 5s.
50 Frontino, £4.	100 Polrose, offer wanted.	
30 Glenrock, £1 13s. 9d.	50 Port Phillip, 8s.	100 Ditto, pref., 15s.
50 Glenroy, 9s.	50 Potosi, 26s.	75 Walkham Uni., fully paid, 16s.
10 Grogwinion, £2¾.	25 Prince of Wales, 13s.	
25 Herodsfoot, 11s. 3d.	100 Parys Copper, 12s	35 West Phœnix, 27s. 6d
30 Hingston Down, £1 3 9	50 Pestarena, 6s. 6d.	60 Wheal Crebor, £3 11 3
100 Javali, 5s.	30 Ruby, £7 3s. 9d.	10 West Kitty, £5¼.

. SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.
BUYER of CAMBRIAN MINE Shares,

RAILWAYS—SPECIAL BUSINESS.
FOREIGN BONDS—SPECIAL BUSINESS.
AMERICAN STOCKS AND SHARES—SPECIAL BUSINESS.
Fortnightly accounts opened on receipt of the usual cover in these and all Stock Exchange Securities.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.
ESTABLISHED 1842.

INDIAN GOLD MINES.—SPECIAL BUSINESS in:—

Devala Moyar.	Indian Kingston.	Rhodes Reef.
Devala Central.	Indian Phœnix.	South-East Wynaad.
Great Southern Mysore.	Indian Trevelyan.	South Indian Gold.
Indian Glenrock.	Mysore.	Tambracherry.
	Ooregum.	Wynaad Perseverance.

At CLOSE MARKET PRICES, free of commission.
. Reliable information given on any of the above. A daily price list issued giving closing quotations. SPECIAL BUSINESS in Frontino and Bolivia Potosi, Ruby, Nouveau Monde, and Richmond.
. SHARES IN THE ABOVE INDIAN OR OTHER GOLD AND SILVER MINES SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

MR. W. H. BUMPUS, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER
44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description.
RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS.
TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS.
Accounts opened for the Fortnightly Settlement
A List of Investments free on application.

MR. BUMPUS has SPECIAL BUSINESS in the undermentioned:—

50 Almada, 7s.	3 East Pool, £37¾.	25 Ruby, £7½.
20 Arendal. £2 15s.	40 East Van, 27s. 6d.	10 Richmond, £16.
5 Blue Hills, £3.	25 Frontino, £4 2s. 6d.	50 So. Indian, £2.
100 Bodidris. 20s.	5 Great Laxey, £17¾.	5 Tincroft, £18.
25 Bedford United.	20 Great Holway, £5½.	60 Tankerville, 11s.
50 Carnarvon, 18s 6d.	100 Grey's Brewery, £3¾.	5 Van, £9¼.
25 Copiapo, £2 16s. 3d.	25 Hingston Down, 23s 9	50 West Goldolphin, £2.
100 Chontales, 2s.	50 Indian Glenrock, £1⅜	15 Wheal Sisters, 40s.
5 Cape Copper, £43.	40 Kit Hill.	25 Wheal Grenville, £8⅛
30 Colorado, £2 7s. 6d.	150 La Plata, 25s.	100 Wheal Jewell, 14s.
100 D'Eresby Mountain, offer wanted.	25 Marke Valley, £1⅛.	5 Wheal Peevor. £17.
	50 New Trumpet.	15 Wheal Agar, £14 8s 9d
50 Derwent, 27s. 6d.	100 Nouv. Monde, 20s.	50 West Polbreen, 29s.
2 Dolcoath. £55½.	75 Potosi, 25s.	10 West Kitty, £5¼.
70 Devon Friendship, 20s	60 Pen-yr-Orsedd, 25s.	30 Wheal Fortune.
15 Devon Consols, £9.	20 Panulcillo, £5¾.	50 Wheal Boys, £2.
50 Devala-Moyar, £1 11	50 Pary's Copper, 13s. 6d.	50 West Holway.
60 Eberhardt, 11s. 3d.	100 Rhodes Reef, 15s.	

SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.
Mr. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.

IMPORTANT TO INVESTORS.—The position of the TIN market is steadily improving, and in all probability there will be a considerable advance in the price of this metal very shortly.
Shares in SOUND TIN MINES should, therefore, be bought at present prices, as many of them are likely to have an early and substantial rise.
The following are particularly recommended:—

WHEAL GRENVILLE.	NEW TRUMPET CONSOLS.
WEST GODOLPHIN.	NEW PEEVOR.
WEST KITTY.	WHEAL BOYS.
WHEAL AGAR.	NEW KITTY.
WEST POLBREEN.	GOODEVERE.

WILLIAM HENRY BUMPUS, SWORN BROKER.
OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

MR. W. TREGELLAS, 40, BISHOPSGATE STREET WITHIN, E.C.,
Deals in all descriptions of STOCKS and SHARES at close market prices, and is always in a position to do business in GOLD HILL, SANTA BARBARA, PITANGUI, and BRAZILIAN GOLD MINES.

MR. GEORGE BUDGE, STOCK AND SHARE DEALER
9, GRACECHURCH STREET, LONDON, E.C. (Established 28 years).
ALL BUSINESS TRANSACTED FREE OF ANY CHARGE FOR COMMISSION.
Notice to Investors and Speculators.
Mr. BUDGE has DEALINGS in—

40 Bedford United.	78 Gold Coast.	120 Parys Copper.
100 Brazilian.	25 Gunnislake (Clitters')	100 Port Phillip.
100 Cherambadi.	35 Hingston Down.	100 Potosi.
30 Carnarvon.	50 Indian Trevelyan.	70 Polrose.
2 Carn Brea.	40 Indian Phœnix.	50 South Devon.
100 Dingley Dell.	110 Javali.	100 Sentein.
75 Don Pedro.	25 Kit Hill.	45 South Darren.
50 Drake Walls.	120 Kapanga.	90 Tolima.
150 Devala Moyar.	20 Lead Hills.	5 Tincroft.
110 Eberhardt.	50 Lady Ashburton.	10 Van.
50 East Caradon.	10 Minera.	20 West Kitty.
4 East Pool.	70 New Kitty.	100 West Caradon.
20 Frongoch.	50 New Peevor.	75 West Polbreen.
50 Gawton.	70 Okel Tor.	10 Wheal Agar.
60 Glenroy.	100 Pandora.	50 Wheal Coates.

BRITISH AND FOREIGN MINING OFFICES.
MESSRS. PETER WATSON AND CO.,
18, AUSTIN FRIARS,
OLD BROAD STREET, LONDON, E.C.
BANKERS: THE ALLIANCE BANK (Limited).

MESSRS. PETER WATSON AND CO.'S BRITISH AND FOREIGN MONTHLY MINING NEWS—STOCK AND SHARE INVESTMENT NOTES—MINES, MINERALS, AND METAL MARKETS—SHARE LIST, No. 832, VOL. XVI., for JULY month, will shortly be ready, and will be sent to customers on application.

Annual Subscription..... 5s. | Single Copy..... 6d.

MESSRS. PETER WATSON AND CO.,
18, AUSTIN FRIARS, E.C.

MR. ALFRED E. COOKE,
DEALER in BRITISH and FOREIGN STOCKS and SHARES of EVERY DESCRIPTION.
76, OLD BROAD STREET, LONDON.
ESTABLISHED 1853.

THE INVESTORS' GAZETTE.	SOUND ADVICE. PROFITABLE SELECTIONS. CHEAP SHARES.
GOLD SHARES. TIN SHARES. COPPER SHARES.	Read the INVESTORS' GAZETTE.

Shares in all the LEADING GOLD, TIN, COPPER, and LEAD MINES on BETTER TERMS than those advertised.
Orders by telegram executed immediately at NET PRICES FREE OF COMMISSION.
ALFRED E. COOKE,
76, OLD BROAD STREET, LONDON.
(Over 14 years at the above offices, adjoining the Stock Exchange, with which they are in DIRECT TELEGRAPHIC COMMUNICATION.)

STOCKS AND SHARES,
FOREIGN BONDS, TELEGRAPHS, TRAMWAYS, RAILWAYS, AND OTHER LEADING SECURITIES.
MR. JAMES STOCKER, STOCKBROKER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.
Special Business at close prices in all British, Colonial, and Foreign Mine Shares. BANKERS: LONDON AND WESTMINSTER.

JOHN B. REYNOLDS, STOCK AND SHARE DEALER,
37, WALBROOK, LONDON, E.C.
ESTABLISHED 25 YEARS.
BANKERS: LONDON JOINT STOCK.
Pamphlet ready on application.

WEST KITTY,
WEST POLBREEN, and
NEW KITTY.
For comments on these and other Mines, Mr. REYNOLDS refers to his remarks on page 914.

FERDINAND R. KIRK, STOCKBROKER,
5, BIRCHIN-LANE, LONDON, E.C.
Fortnightly Accounts opened in all Stock Exchange Securities on receipt of the usual cover.
BANKERS: LONDON AND WESTMINSTER, Lothbury.

MR. E. J BARTLETT, BRITISH AND FOREIGN STOCK AND SHARE DEALER, No. 30, GREAT ST. HELEN'S, LONDON, E.C.
Now ready, Fifteenth Edition, enlarged to 100 pages, post free 1s.
HOW TO INVEST.—No one should invest either large or small sums without first reading this work.
"More valuable than ever."—Vide Public Press.

HORACE J. TAYLOR, STOCK AND SHARE DEALER,
(Late of the PORT PHILLIP AND VICTORIA [London] MINING COMPANIES, Limited.)
38, GREAT ST. HELEN'S, LONDON, E.C.
BUSINESS TRANSACTED IN EVERY DESCRIPTION OF STOCKS AND SHARES.
The following undertakings are recommended:—
BWLCH UNITED, WEST LISBURNE, AND WHEAL COATES.
The two former are Silver-Lead Mines, in Cardiganshire, and the latter a Tin Mine, in the famed St. Agnes district, and a great rise in prices is expected.
N.B.—I am a BUYER of 1000 BWLCH UNITED shares, or any part; and shareholders would do well to communicate before selling elsewhere, for I can offer the VERY BEST OF PRICES.
BANKERS: The CENTRAL BANK OF LONDON (Limited).

MR. JOHN RISLEY, STOCK AND SHARE BROKER,
38, CORNHILL, LONDON E.C.
ESTABLISHED 20 YEARS.
WEST CARADON, PARYS, NEW WEST CARADON, WEST CREBOR, and SORTRIDGE COPPER specially recommended.
SHARES BOUGHT OR SOLD ON COMMISSION.

MR. ALEXANDER DAVIDSON,
STOCK AND SHARE DEALER,
139, LEADENHALL STREET, LONDON, E.C.,
OFFERS the FOLLOWING SHARES FOR SALE at PRICE AFFIXED, PROVIDED they are NOT SOLD, WITHDRAWN, or PRICE ADVANCED:—

100 Bodidris, 14s.	10 New Wye Valley, 12s 6	140 So. Wh. Crebor, 17s. 6
100 Drakewalls, 18s.	150 Okel Tor, 20s.	100 Tamar Sil.-lead, 17s. 6
50 Friendship, 19s. 6d.	100 Polgooth Gt. United 17s., or offer.	50 West Devon, 8s. 9d.
10 Grogwinion, £2.		5 Ystwith, 18s.
50 Kit Hill, £1.	110 Sortridge Cons, 18s 3d	

The following SHARES are FOR SALE. Reasonable offers will be accepted:—

100 East Devon.	145 Mounts Bay.	50 Chile.
90 East Rose.	85 Old Shepherds.	15 Carn Camborne.
100 Great Wheal Polgooth	230 Parka Mines.	25 Gt. Southern Mysore.
90 Gover Consols.	5 Tankerville.	100 Gold Coast.
60 Mysore Reefs.	50 Walkham United.	150 Indian Kingston.
50 Norway Copper.	50 Lady Ashburton.	15 Olathe.
	50 Indian Consolidated.	

MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,
29, BISHOPSGATE STREET, LONDON, E.C.,
Can SELL the following SHARES at prices annexed:—

25 Bedford Unit., £1 18 9	40 Hingston Down, 22s 6	100 Pandora, 13s.
75 Brazilian Gold, 18s. 9	20 Hoover Hill, £1 3s.	50 Pestarena, 6s
55 Bwlch United, 37s. 6d	50 Indian Hingston, 19s 9	25 Parys Corpora., 14s 6d
20 Carn Camborne.	50 Indian Glen., £1 13s.	20 Panulcillo, £6.
25 Carnarvon, 18s. 6d.	40 Indian Phœnix, £1 6	50 Rhodes Reef, 16s.
25 Colorado, £2¾.	25 Indian Trevel., £1 3s 3	200 Rossa Grande, 4s.
40 Dev. Friendship, 20s	75 I. X. L., 3s. 9d.	25 South Devon, £1⅞.
100 Don Pedro Gold, 11s 6	100 Kapanga, 6s.	25 South Indian, £1 18 9
10 Devon Con., £8⅞.	50 Kit Hill, 17s. 6d.	50 Scottish Austra., £1¼
50 Devon Gt. Uni., 32s. 6	50 Lady Ashburton, 18s 9	40 Tamar Silver-Lead.
40 English-Austra., 19s 3	50 La Plata, £1 5s.	50 Tankerville, 11s. 3d.
100 Exchequer, 3s. 3d.	35 Leadhills, £1 17s. 6d.	50 Tin Hill, 20s.
25 East Caradon, 22s. 6d.	10 Minera, £8 7s. 6d.	40 Van Consols & Glyn United, 5s. 9d.
50 Flagstaff, 10s. 3d.	10 Marke Valley, £1 6s. 3	
30 Frontino, £4¼.	50 New Peevor, 22s. 6d.	90 West Crebor, 10s. 6d.
50 French Date Coffee, (15s. paid), 9s.	40 Nouveau Monde, 19s 9	100 West Lisburne, 25s.
	50 N.Trumpet Con.	50 Wheal Jane, 8s.
20 Gunnis. (Clit.), £2⅞.	75 Potosi, £1 7s.	50 Ystwith, 20s.
25 Grogwinion, £2.	50 Prince of Wales. 15s.	

WHEAL ELIZABETH recommended. Special dealings in the shares.

THE "DIFFERENTIAL" PUMPING ENGINE
(DAVEY'S PATENT),
FOR
DRAINING MINES, WATER SUPPLY OF TOWNS, IRRIGATION, SUPPLYING DOCKS, PUMPING SEWAGE, and GENERAL PUMPING PURPOSES.
HATHORN, DAVEY, AND CO.,
LEEDS.
HATHORN, DAVEY, and Co. have Patterns of "Differential" Engines of all sizes, from 5 to 500-horse power, and have facilities for supplying very powerful Engines and Pumps at a short notice.
See Illustrated Advertisement every alternate week.

MR. CHARLES THOMAS,
MINING AGENT, STOCK AND SHARE DEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

MR. ALFRED THOMAS
MINING AGENT, AND STOCK AND SHARE DEALER,
10, COLEMAN STREET, LONDON, E.C.
MINING INVESTMENTS.—Second Edition, just published.
"What to Select, and What to Avoid," by ALFRED THOMAS, 10, Coleman street, London, E.C. Will be forwarded on receipt of 12 stamps.

TO INVESTORS, SHAREHOLDERS, TRUSTEES.
SAFE DIVIDEND INVESTMENTS PAYING 4 TO 6 AND 10 PER CENT. PER ANNUM ON PRESENT OUTLAY.
SHARP'S INVESTMENT CIRCULAR.
The JULY EDITION (post free).
Should be consulted by Investors and Shareholders.
It is a Reliable "Guide," giving valuable information and Sound Advice, &c. It gives Market prices; Dividends upon outlay, when payable; Reports, &c., &c.
IT CONTAINS ALL THE SAFE INVESTMENTS IN THE FOLLOWING:—

English, Foreign Railways.	Insurance, Gas, Waterworks.
Preference, Debenture Stocks.	Colonial, Foreign Stocks.
Indian, American Stocks.	British, Foreign, Colonial Mines
Bank, Financial Shares.	Tea, Land Shares.
Tramway, Telegraph Shares.	Shipping, Dock Shares.
Municipal Bonds.	Miscellaneous Shares, &c., &c.

HENRY GOULD SHARP,
STOCK AND SHARE BROKER, 21, THREADNEEDLE STREET, LONDON, E.C.—ESTABLISHED 1852.
Bankers—London and County Bank, Lombard-street, London, E.C.

INVESTMENTS.—GOLD, SILVER, AND HOME MINES, AMERICAN and BRITISH RAILS, FOREIGN BONDS, and all STOCKS and SHARES.
INVESTMENTS.—SOUND DIVIDEND INVESTMENTS. Reliable advice upon Stocks and Shares paying 4 to 10 per cent. per annum. READ
"INVESTMENTS WHAT TO SELECT—WHAT TO AVOID." Oldest and most trustworthy Investors' Guide No. 544, JULY EDITION, now ready (free).
F. W. MANSELL AND CO., STOCKBROKERS,
43 AND 43A, PALMERSTON BUILDINGS, E.C.
Established 1857—Bankers: London Joint-Stock Bank.

MR. EDWARD ASHMEAD, 2, DRAPER'S GARDENS, E.C.,
MINING SECRETARY, AUDITOR, AND ACCOUNTANT.

THOMAS B. LAWS, STOCK AND SHARE DEALER,
AND MINE ACCOUNTANT,
2, CHURCH COURT, CLEMENTS LANE, LONDON.

MR. CHARLES J SIMS,
MINING AGENT, STOCK AND SHARE DEALER,
2, DRAPER'S GARDENS,
LONDON, E.C.

MESSRS. ABBOTT AND WICKETT,
STOCK AND SHARE BROKERS, REDRUTH.
ORDERS BY TELEGRAM PROMPTLY EXECUTED.

JOHN BANTING ROGERS, STOCK AND SHARE DEALER,
ST. CLEMENT'S HOUSE, LOMBARD STREET, LONDON.

WE ARE SELLERS OF THE FOLLOWING:—
Offers for any portion invited.

10 Union Trust.	10 Devonport and Tiverton Brewery.	70 East Craven Moor.
50 Grey's Brewery.		45 West Craven Moor.
40 Organos Gold.	500 Wheal Jane.	125 Herodsfoot.
	30 South Darren.	

ENDEAN AND CO., 85, GRACECHURCH STREET.

TAMAR SILVER-LEAD AND FLUOR-SPAR MINE.—The success of this mine is almost *un fait accompli*. Indications in the 27 fm. cross-cut south are favourable for cutting into a rich body of silver-lead at any moment, which will cause shares to rise to £5 or £10 each.
It is therefore not surprising to find parties who have sold shares which THEY CANNOT DELIVER using every endeavour to get hold of them cheaply, and with this object in view "bogus" lots are advertised, and said to be sold by auction at ridiculously low prices. As a matter of fact, no transfers ever come into the company's office for these cheap lots so advertised.
CAUTION TO SHAREHOLDERS.—Don't be frightened into selling your shares AT ANY PRICE till the nature of the recent discovery is more fully ascertained.
BUY EVERY CHEAP SHARE YOU CAN GET, but do not part with your money until you receive the certificate. By adopting this course you will frustrate the designs of those who depreciate the value of your property by selling shares at low prices, which they do not and cannot deliver.
BEWARE OF PEOPLE SEEKING TO EXCHANGE shares of no value for Tamars.
THE NEW DISCOVERY holds good, the lode being 3 ft. 6 in. wide, producing splendid silver lead, which is much richer in silver than when the lode was first cut into. A sample assayed by Messrs. Johnson, Matthey, and Co., on the 2nd inst., gave a produce of 73·500 ozs. of silver per ton of 20 cwts., and 80 per cent. of lead. This is the most valuable discovery made in the district since the days of South Tamar. It is, in fact, the same rich lode which produced over £1,000,000 worth of silver-lead in that mine.
Buyers and Sellers of Tamars should communicate with Messrs. ENDEAN AND CO., Stock and Share Dealers, 85, Gracechurch-street, London, E.C. Established 1861.
Bankers—London and Westminster Bank, Lothbury.

FRANCIS FRANCIS, M.E.,
CORN EXCHANGE CHAMBERS, CHESTER.
SPECIAL BUSINESS in HALKYN MINES DRAINAGE, RHYDALUN, RHOSESMOR, DEEP LEVEL, NORTH HENDRE, TRUE BLUE, PEN-YR-ORSEDD and others in the Drainage Areas.
Also, in PITANGUI (Gold), BRAZILIANS, SANTA BARBARAS, and FRONTINOS.

MR. JOHN L. M. FRASER,
(18 Years' Experience at the Great Minera and other Mines.)
CONSULTING MINING ENGINEER, &c.
GREENFIELDS, WREXHAM.
Visits the principal Mines in North and South Wales, Devon, and Cornwall Reports from £3 3s., and expenses.
BRITISH SILVER-LEAD.—Send for report of W. Eddy, Esq., on these Mines.
Gold, Silver, Lead, Copper, and Tin Mines and Collieries, supplied with Machinery, Plant, Materials, and Stores of every description. Prices on application

The SUBSCRIPTION LIST of the KIANDRA GOLD MINING COMPANY (LIMITED) will close THIS DAY for LONDON, and on MONDAY for the COUNTRY.

KIANDRA GOLD MINING COMPANY

(LIMITED),

COUNTY OF SELWIN, NEW SOUTH WALES, AUSTRALIA.

Incorporated under the Companies Acts, 1862 to 1880. The liability of shareholders is limited to £1 per share.

Capital, £150,000 in 150,000 shares of £1 each.

40,000 of which shares, fully paid-up, are taken by the vendors as part payment of the purchase-money.

110,000 SHARES.

Are offered to the public, applications for which are now invited, payable as follows:—

On application, 1s. per share; on allotment, 1s. per share; one month after allotment, 8s. per share; two months after allotment, 10s. per share.

Where no allotment is made the amount paid on application will be returned in full.

DIRECTORS.

FRANCIS BENNOCH, Esq., Chairman of the Governments Stock Investments Company (Limited).

*JAMES CROYLE, Esq., 2, Talbot Court, Gracechurch Street, E.C.

CHAS. JAMES HARVEY, Esq., M.E., Lee, Kent.

HENRY WILLIAM LAMB, Esq., Director of the English Australian Gold Mining Company (Limited).

JOHN PROCTER, Esq., Barrister, 2, Crown Office Row, Temple.

R. M. ROBERTSON, Esq., Director New Zealand Agricultural Company (Limited).

* NOTE.—JAMES CROYLE, Esq., of 2, Talbot Court, Gracechurch-street, London, will join the Board of Directors as soon as the mines have been duly tranferred to the company.

CONSULTING AND MINING ENGINEER.

Mr. PHILLIP DAVIES.

BANKERS.

THE ALLIANCE BANK (Limited), Bartholomew Lane, London, E.C.

THE COMMERCIAL BANK OF SYDNEY, Sydney, N.S.W.

BROKERS.

Messrs. MARSHALL and HULBERT, 18, Finch Lane, E.C.

SOLICITORS.

Messrs. FOWLER and CO., 3, Victoria Street, S.W.

AUDITORS

To be elected by the shareholders.

SECRETARY—Mr. ARTHUR LEARED.

OFFICES OF THE COMPANY.

NO. 2, TALBOT COURT, GRACECHURCH STREET, LONDON, E.C.

NOTE.—There is no royalty payable by the company.

PROSPECTUS.

This company is formed to take over and work the valuable mining properties known as the Empress Gold Mine, the Emperor Gold Mine, the Homeward Bound Gold Mine, and the Cornishman's Claim, situate on the best part of the Kiandra Gold Field, in the Tumut and Adelong district, New South Wales, Australia.

The properties, which are secured under Miners' Right Titles, consist of 65 acres of land, containing auriferous deposits of alluvial wash from 20 to 30 feet in thickness.

The auriferous deposits of the Kiandra Gold Field extend, as the reports show, over an immense area, and are practically inexhaustible, requiring only a supply of water to render available the riches contained therein.

Fortunately the obtainiug of this supply presents no great engineering difficulties, as will be seen from the exhaustive reports (referred to below) of Lamont Young, Esq., geological surveyor, and of H. B. Sullivan, Esq., L.S., mining surveyor, who were specially appointed by the Government of New South Wales to make a thorough investigation of the locality, and to ascertain whether or not it was feasible to bring a plentiful supply of water to the Kiandra Gold Field.

Furthermore, in addition to the special reports made by Messrs. Young and Sullivan:—the mining registrars residing on the gold field have repeatedly reported upon Kiandra to the New South Wales Government; therefore, more reliable information respecting these vast auriferous deposits is obtainable, from important and authoritative sources, than is generally to be met with in the case of mining properties offered to the public.

Mr. Phillip Davies and Mr. Fred. B. Gipps, who are well known in Australia as two of the most experienced mining engineers, have also made special surveys of the properties now offered, and having carefully examined the locality, have formed an estimate of the cost of bringing water from the Tumut river to the gold field.

If any further proof as to the value of these properties be required than that contained in the Government annual reports—Department of Mines—and in the exhaustive statements of Messrs. Young and Sullivan, above alluded to, it will be found in the carefully compiled reports recently made by Mr. Phillip Davies and Mr. Fred. B. Gipps, civil mining engineer, which can be seen at the offices of the company.

Copies of the reports of Messrs. Young and Sullivan, together with maps, can be seen at the offices of the company.

As appears from the foregoing statements these extensive auriferous alluvial deposits and quartz reefs have hitherto been almost entirely neglected, owing to the inadequate supply of water, the present method of collecting and hoarding up the small quantity derived from melted snow being of no practical value, as it only lasts from six to ten weeks each year.

This scarcity of water, however, need no longer stand in the way, as the engineers report that a full supply can easily be obtained, and with the expenditure of the sums proposed a gold field known to be one of the largest and richest in the world may be opened up.

This company so soon as a permanent supply of water has been obtained can extend its operations and promote new undertakings, and will also be in a position to supply water to other companies in the district at a considerable profit.

To concentrate the value of the above properties and adjoining ground—which, as Mr. Phillip Davies remarks, would fall to the share of a company purchasing the Empress, Emperor, Homeward Bound, and Cornishman's Mines, and their water rights—the following estimates are arrived at, viz:—

The Empress Mine, estimated to yield	£540,724
The Emperor group of mines, estimated to yield.....	463,478
	£1,004,202

The above million sterling, and more, worth of gold is contained in a comparatively small area of the Kiandra Gold Fields, so that supposing this company obtains from the New South Wales Government only 150 additional acres, this would, at the same low estimate per cubic yard of wash-dirt, add over two millions to the above figures. But in reality there is, practically, no limit to the area of auriferous wash-dirt, it is, therefore, easy to perceive the immense advantages to be gained for the shareholders in this company in having command of all the water-races and supply. The capital can easily be returned many times over from this source, in addition to the handsome dividends anticipated from their own workings.

The engineers state that timber suitable for all purposes is plentiful in the Kiandra district.

The following agreements have been entered into, viz.:—Dated 13th July, 1881, between James Croyle of the one part, and Jacob Werner Uloth of the other part. Dated 14th July, 1881, between Jacob Werner Uloth of the one part, and Arthur Leared of the other part.

These agreements, together with the Memorandum and Articles of Association, can be seen at the offices of the solicitors to the company.

Applications for shares must be made in the accompanying form, and forwarded, together with a deposit of 1s. per share, to the bankers of the company, to the brokers, or to the secretary, at the offices of the company, from any of whom prospectuses and forms of application can be obtained.

The vendor, who is the promoter of the company, has fixed the price of the properties at the sum of £64,000, payment of which is to be made as follows—viz., £40,000 in fully-paid up shares, and £24,000 in cash; he undertaking to defray all expenses incidental to the formation of the company up to the date of allotment, excepting the broker's commissions.

Application will be made in due course to the committee of the Stock Exchange for an official settlement.

FIVE PER CENT. CUMULATIVE PREFERENCE SHARES OF £10 EACH, WITH PARTICIPATION IN SURPLUS PROFITS.

THE LLAY HALL COAL AND CLAY WORKS COMPANY (LIMITED)

INVITE APPLICATIONS for ONE THOUSAND SHARES, balance of the FIRST ISSUE of the above.

Allotments will be made in order of application.

Prospectuses on application to the Secretary, at the London Offices, 7, Queen Victoria-street, E.C.

MECHANICAL VENTILATION OF COLLIERIES.

At the present time revolving fans are for the most part used for producing currents of air. The fans are formed of an axis having radial blades projecting from it; the blades are enclosed in a circular casing with closed ends, and from which there is a tangential outlet. An inlet is formed at the centre of one or both of the ends of the casing for air to enter. When the axis is revolved air is drawn in at the central opening, and is driven outwards by the radial blades, and forced away through the tangential outlet. Messrs. W. and B. VERITY, of Stanhope-street, Euston Road, have found that the action of such apparatus can be greatly improved by surrounding the central inlet opening with a cylinder projecting outwards from the end of the casing parallel with the axis, and by securing to the axis or to the fan blades a screw blade or blades, such screw blade or blades being contained within the cylinder, the cylinder is open at its end; and also, if desired, an opening may be formed on one side of it for air to enter. By this means when the axis of the fan is revolved, the screw blade or blades will draw air inwards through the cylinder, and deliver it into the centre or the fan casing, and will so constantly keep up a supply of air to the centre of the fan whilst the fan blades force the air outwards and away through the tangential outlet. By this means the volume of air delivered by a fan may be greatly increased without the expenditure of more driving power. An inlet cylinder and screw blades may thus be applied at one end only of the cylinder, or a screw and inlet cylinder might be applied at both ends. The casing of the fan may also be made with numerous outlet openings instead of with a single outlet only.

In some cases, and especially when the fan is driven by a small jet of water directed against the corrugated circumference of a wheel which is fixed on the fan axis, they mount the fan axis in a vertical position, and with the corrugated wheel either above or below the fan and screw blades. The lower end of the axis is passed down through a loosely fitting stuffing box into a closed vessel filled with oil, and a cone point at the bottom of the vessel enters a corresponding hollow in the end of the axis, the upper end of the axis is pointed and enters a corresponding recess at the bottom of a closed vessel filled with oil. This oil vessel is mounted in vertical guides in the frame of the apparatus, so that it can be raised or lowered. A fine hole is made from the bottom of the recess into the oil vessel, and the oil vessel is either allowed to rest by its own weight on the top of the spindle or is pressed downwards on to it by a spring. In this way, when a minute quantity of oil has passed down the fine hole and come between the coned surfaces of the spindle and oil vessel, the entrance of the air into the oil vessel is closed, and no further oil descends until the oil between the coned surfaces has escaped sufficiently to allow a minute quantity of air again to enter the oil vessel. By supporting the axis of the fan in the above manner it can be turned with but little friction, and will run for a great length of time without attention or the addition of any oil for lubrication.

THE PROGRESS OF CHEMICAL DISCOVERY.

WATTS'S DICTIONARY OF CHEMISTRY.

For some years past the excellent Dictionary of Chemistry, by Henry Watts, has been regarded by practical chemists, and in every school where chemistry is taught, as an indispensable work of reference, and few indeed are the instances in which it is referred to in vain. The author's position as Editor of the Journal of the Chemical Society of course gives him the command of an amount of information which few could hope for. Of this he has given his readers the fullest possible benefit; and the great value of the book is maintained by the periodical issue of Supplements bringing the knowledge down to the latest moment. The second part of the eighth volume, or third supplement, occupying about 1250 pages, has now been issued,* and completes the record to the end of 1878, including some of the most important discoveries which have been announced up to the end of last year. Although a dictionary is not usually very interesting reading, the fact that Mr. Watts's work is rather an encyclopaedia makes it an exception, and those who suppose that they have carefully watched for scientific announcements made in the publications they have been accustomed to read, will nevertheless be surprised to observe the almost innumerable discoveries recorded in the book of which they have heard almost absolutely nothing; those discoveries being, moreover, in the branch of industrial chemistry with which they are most intimately connected, and even of a character which they might themselves turn to commercial account, a few only of them will be here referred to.

The new metal—Gallium—for example, is noticed in the first page of the volume. It was discovered by Lecoq de Boisbaudran in a zinc-blende from the Pierrefitte Mine, in the Pyrenees, a mine in which many readers of the *Mining Journal* are interested; and it has since been found in blendes from other localities. The metal exhibits a fine dull silver-white surface, full of shining points, consisting of microscopic crystals. It melts at the heat of the hand, and may remain for weeks in a state of surfusion even at a temperature near 0°. Gallium is hard, but nevertheless leaves a bluish grey trace upon paper, and is but slightly malleable. Over two pages are devoted to the description of this metal and its salts. A page is given to recent researches on Glucinum or Beryllium. The article on Gold occupies more than three pages, but silicate of gold seems to be still unknown to the world of science, although Mr. Kagenbusch claims to have discovered it. The Dictionary deals only with demonstrated discoveries. On Heat, a matter in which all are interested, there is a very long and instructive article. In a note on Indium it is mentioned that calamine, very rich in indium, is found in the Onela mines, in the province of Bergams. The chemistry and metallurgy of Iron and Steel is treated of in a long and exhaustive article. Recent researches in connection with Lanthanium and its salts are carefully noted. In the article on Lead an interesting reference is made to a method described by Rozeau. The lead is melted in a pot, skimmed, and then transferred to a second pot, through the bottom of which steam is passed in a fine spray. The steam is blown in with a pressure of 3 atmospheres, and to induce crystallisation the surface of the bath is sprinkled with water. The oxides thereby formed are skimmed off, and the steam which has passed through the fused metal is condensed in chambers, in which the portions of oxide carried with it are at the same time deposited. In the article on Lithium the method of preparing the salts of that metal on the large scale from lepidolite, as practised at Schering's works, at Berlin, and described by Filsinger, is given. Magnesium and its Salts are fully treated of. Upwards of four pages are devoted to Mercury and its Compounds. Experiments by Stanislaus Meunier (article, Metals) on the reduction of the noble metals by metallic sulphides tend to show that the presence of gold in iron pyrites, and more especially that of silver in galena, may be due to reactions of this kind. When sea water acts on a vein of galena the small amount of silver which the water contains may become concentrated in the galena. The separation of sulphur which accompanies this reaction may lead to the formation of silver sulphide, or to the persulphuration of the lead sulphide. On the supposition that the same reaction may be exerted by sodium sulphide Meunier suggests that sulphuretted mineral springs may play a certain part in the formation of mineral veins. There is a good article likewise on Molybdenum and its Salts.

But these references we might continue almost indefinitely, and still give a very faint idea of the contents of the volume, so that it will be preferable to leave the reader and the student to consult it for themselves; but it may be noticed before leaving the bock that another new metal—Norwegium—is among the substances described. It occurs, according to Tellef Dahl, in a nickel glance from the small island of Oterö. It is formed as a black sulphide, together with copper, in the precipate formed by hydrogen sulphide, and may bs easily separated from copper by dissolving the precipitate in hydrochloric acid, and mixing the slightly acid solution with a large quantity of water, whereupon the norwegium is precipitated. The metal is very similar to bismuth, and its behaviour and reactions are also much like those of that metal. Mr. Watts gives full credit to those who have rendered him assistance. Prof. H. E. Armstrong, F.R.S., has contributed the articles on Isomerism, Naphthalene, and (in part) Circular Polarisation; Mr. J. C. Brown, F.C.S., that on Vapour Density; Dr. Flight, that on Meteorites, a very proper subject for him to write about; Prof. G. C. Foster, F.R.S., contributes an excellent article on Thermodynamics; Mr. G. F. Rodwell, of Marlborough College, has two articles, one on the Effects of Heat on the Haloid Compounds of Silver, and the other on Volcanic Products; Dr. A. Schuster, F.R.S., of St. John's College, Cambridge, furnishes an interesting article on Spectral Analysis; Prof. T. E. Thorpe, F.R.S., of the Yorkshire College of Science, contributes those on Specific Volumes, and on Water; and M. R. Warington, F.C.S., that on Nitrification.

The work is so well known and so generally appreciated from the previous volumes that probably the highest commendation that could be given to that now issued is to say that it fully maintains the character it has already secured, and this can unquestionably be said with the fullest justification.

* "A Dictionary of Chemistry and the Allied Branches of Other Sciences." By HENRY WATTS, B.A., F.R.S., F.C.S Assisted by Eminent Contributors. Third Supplement—Part II. London: Longmans, Green, and Co.

MINES IN DEVON AND CORNWALL.—In the House of Lords on Tuesday, the Earl of Mount Edgecumbe asked whether the attention of the Home Office had been directed to that portion of the report of the Inspector of Metalliferous Mines for Devon and Cornwall, in which he says:—

"On looking down the list of fines one cannot help being struck by the fact that most of them are absurdly small. It almost seems that some magistrates think more of the life of a pheasant than they do that of a man. For I believe that if a similar number of convictions for poaching cases were taken at random the average fines would be greater. The fact is a very large number of the magistrates are interested directly or indirectly in mining. Many of them are owners of mining property, and have been troubled by repeated notices to fence dangerous abandoned shafts, and have thereby been put to considerable expense. Some, indeed, have been prosecuted for neglecting to attend to these notices, others are shareholders in mines in the district, and as such are not disposed to look favourably upon Government restrictions, which they think may interfere with their profits. As a natural consequence fines have, on the whole, been light, and the inspector's labours have been increased considerably. If the offences had been punished with greater severity mine agents would have attended to the provisions of the Act with much more diligence. I am convinced that this mistaken leniency on the part of the magistrates leads to a delay in carrying out all the provisions of the Act, and thereby tends to keep up the death-rate from accidents."

And whether the department would call upon the Inspector for a categorical statement of the circumstances which had led him to make this most serious charge against the magistrates of Cornwall. The Earl of Dalhouse said that the attention of the Government had already been called to that question, and the Inspector of Mines had been requested to make a further report on the matter.

MINING ENTERPRISE IN COLORADO.—The favourable report of Professor J. Alden Smith on the mineral resources of Colorado has already been noticed in the Journal, but it seems that certain qualifications which he makes have been ignored. He has often stated, and still adheres to the opinion, that there are many mines in Colorado whose net profits are from 30 to 65 per cent. of the gross product. This can be substantiated from the records. He does not wish to be understood, however, as saying that mines which are over capitalised will pay such profits on the amount of their capitalisation.

NOUVEAU MONDE.—The London Committee have issued the report of Mr. T. Lambert, M.E., who has recently returned from Venezuela, after a residence of 9 years in the immediate neighbourhood of the company's mines. Mr. Lambert has had great experience in connection with the Potosi, Callao, and other mines, and was also engaged on the Nacupai Mine with Mr. C. Oxland, so that he is acquainted with every detail of the company's property. With regard to No. 9 Concession, the gerant has already received offers of a very substantial character from parties in Paris who have had the property inspected by their own engineers. Mr. Bickford Anthony, on his arrival at Bolivar, found an alleged claim on one of the company's concessions, and was advised by the company's lawyer, Mr. Gambur, to stay at Bolivar until that question was settled. For this purpose special powers were required, and immediately forwarded. The committee have now received information from Mr. Anthony that the Supreme Court at Caracas has confirmed the company's title of the property. Mr. Anthony's absence from the mine on this business has been the reason why the committee have not been able to give in the meantime information direct from the mines. He is, however, now at the Nacupai, and very soon the committee will have to report on the progress of his work—the result of which they are confident, will be superior to expectations. The ten concessions (No 1—10), forming the company's property are 1000 acres in extent. Mr. Oxland says that he can confidently state that the Nacupai Mine now is only second to the famous Callao Mine, and that at equal depth it will prove most decidedly its equal. As a proof of the richness of the mines, he reminds the committee that the Nacupai Mine had produced in 4½ years 104,139 ozs. of gold, equal to 416,556*l.*; and this, with 25 stamps at work up to Jan., 1877, and 50 stamps from thence to April, 1878. Mr. Lambert reports that the Mine has been opened by several shafts, provided with powerful machinery, reduction works, containing a mill with 50 Californian stamps erected close to the River Yuruari. The whole of the plant is well constructed and in good working order, at a cost of at least 50,000*l.* With 50 stamps at work, the machinery of the Nacupai Mine will crush 100 tons per day. Taking as a basis the average yield of 2½ to 3 ozs. per ton, the daily produce will be 250 ozs., equal to 1000*l.*, which represents cent. per cent. per annum. Mr. Lambert considers that the result of working only Nos. 1 and 2 of the concessions will not only provide a splendid dividend but will make also a reserve fund sufficient to cover the cost of connecting the several concessions with the mill on the Yuruari, which point is now the centre of the works. By these means the company will have the property paying not only handsome dividends but also costs of improvement, and increasing the returns of the mine, as each concession contributes ore by being connected with the mill. He adds that labour is abundant, and the climate not so malarious as it has been represented. The night air must be avoided and sobriety practised. He has been in those parts during the last nine years, and never enjoyed better health.

LIVERPOOL JOURNAL OF COMMERCE.—The general improvement in the contents and appearance of the Liverpool Journal of Commerce since the accession of Mr. Charles Birchall to the complete control must have been apparent to the readers generally. Mr. Birchall, during his long connection with Mr. Henry Greenwood, whose extensive advertising business he has recently acquired, has evidently brought his energy and perseverance to bear upon the Journal of Commerce, which is now certainly worthy of even increased success.

This undertaking is believed to be quite removed from the class of speculative mines with the uncertainties and disappointments so often attending such projects, as by the arrangements already entered into it is expected to rank amongst dividend-paying mines of the highest class, immediately the mines are opened out.

The mines proposed to be acquired by this company, as will be seen by the sketch-map accompanying the prospectus, are situated midway between the famous San Domingo Mine (owned by Mason and Barry, Limited) to the west, and the well known Tharsis Mine to the east—being distant there from only a few miles—the whole of these mines being on the same belt of metalliferous ground as the celebrated Rio Tinto Mine; but the produce of the mines offered to this company is said to be far more valuable than that of any of the foregoing, from the fact of the ore containing, it is believed, large quantities of silver, lead, and zinc, in addition to the copper and sulphur products.

The position of this company as a new undertaking is entirely exceptional. Such is the demand for ores of the class in question that a contract has been entered into with the well-known firm of Messrs. Richards, Power, and Co., of Swansea, for the purchase by them from the company of the entire quality of ore from the mines during the ensuing five years up to 12,000 tons per annum, at a price which should result in a net profit to the company of about £2 4s. per ton (rising or falling as the ore varies in richness, and alterations occur in the market values of metals), which at that rate would secure to the company a net income for five years of £26,400 per annum—equal to 22 per cent. per annum on the share capital now offered for subscription.

No portion of the purchase money will be paid over until the directors have received the report of an independent engineer, to be sent out by them to inspect the property, as fully explained in the prospectus.

Rio Malagon (Sulphur-Copper and Silver) Mines,

LIMITED.

CAPITAL, £200,000.

First issue of 12,000 shares of £10 each at par, of which 200 shares have already been allocated, leaving 10,000 shares for subscription.

Payable:—£1 per share on application; £4 on allotment; £2 per share on 1st November; the balance in calls at intervals of not less than two months.

Incorporated under the Limited Liability Acts of 1862 to 1880, limiting the liability of shareholders to the amount of their shares.

DIRECTORS.

JOHN DIXON, Esq., C.E., Constructor of the Rio Tinto Shipping and Harbour Works, Chairman.
MARK W. CARR, Esq., late General Manager of the Rio Tinto Company in Spain,
HENRY A. HERBERT, Esq., of Muckross, J.P.D.L., Vice-Chairman of the Limerick and Kerry Railway.
JAMES RENNIE, Esq., C.B., Director London and Glasgow Engineering Company (Limited).
Hon. RANDOLPH STEWART, Director of Richmond Consolidated Mining Company (Limited).

BANKERS—THE LONDON AND COUNTY BANKING COMPANY (Limited), 21, Lombard Street, E.C.
SOLICITORS—Messrs. HENRY KIMBER AND COMPANY, 79, Lombard Street, E.C.
CONSULTING ENGINEERS—Messrs. RICKARD BROTHERS, Queen Victoria Street, E.C.
AUDITORS—Messrs. PRICE, WATERHOUSE, AND CO., 44, Gresham Street, E.C.
AGENTS IN SWANSEA—Messrs. RICHARDS, POWER, AND CO.
SECRETARY (pro tem.) AND OFFICES—CHARLES WATKINS, Esq., 46, QUEEN VICTORIA STREET, LONDON, E.C.

The very valuable mines proposed to be acquired by this company include 52 mining setts, and are known as Sierracilla and Manolita, in the province of Huelva, Spain, on the River Malagon, in the immediate neighbourhood of the famous San Domingo Mine, owned by Mason and Barry (Limited), and the well-known Tharsis Mine—all these mines being on the same belt of metalliferous ground as the celebrated Rio Tinto Mine.

It is well known that this region is an extremely rich mineral country. The three great mines already mentioned have proved this incontestably, and the opening up of the Rio Malagon Mines will add another important property to the group. The ores from the mines of this company, in addition to the sulphur and copper products found therein, contain lead, zinc, and silver in considerable quantities, besides traces of gold, and consequently they are expected to realise considerably higher prices than those obtained for the products from either of the other mines.

In proof of this a contract exists (the benefit of which is made over to the company) with the well-known firm of Messrs. Richards, Power, and Co., of Swansea, for purchasing from the company the whole of its output of ore up to 12,000 tons per annum for a period of five years, with the option of taking on the same terms all additional quantities raised during that period.

The contract, which is based upon the analysis furnished by Mr. R. W. Rickard (of the well-known firm of Rickard Brothers, the mining engineers), of some hundred of tons of the ores, provides, on the present low price of metals, that Messrs. Richards, Power, and Co. are to pay £4 10s. per ton, delivered at Swansea, such price to be increased or reduced should the ore prove to be of higher or lower quality than the value shown by such analysis, and also in accordance with the market value of metals.

From Mr. Rickard's report, copy of which accompanies the prospectus, it is expected that the ores will fully equal the analysis, and as the shafts proceed deeper may probably prove richer. The importance of this contract is evident, as a market is thereby secured at once for the whole produce of the mines on very satisfactory terms from the outset, and the effect expected will be to establish the undertaking as a dividend-paying mine within a very short period of the property being opened up.

There is every facility for extraction of the ore, and an ample supply of water, the entire charges, including royalty, transport from the mines, and freight to Swansea, is estimated by Mr. Rickard, who has made careful enquiry on the spot, at only £2 6s. per ton, which would, assuming only the present low prices and the analysis above-mentioned, leave a net profit of £2 4s. per ton on the whole quantity to be delivered to Messrs. Richards, Power, and Co., under the above-mentioned contract. The owners of adjacent mines are preparing to construct a railway to the River Guadiana, which would still further reduce the cost of the carriage of the ore, and the projected Government railway from Huelva to Portugal passing close to the mines will afford even greater facilities of transport.

From the report of Mr. Rickard it will be seen that these mines, which he considers one of the best properties in the Huelva district, were worked in ancient times by the Romans, as was the case with the Rio Tinto, the Tharsis, and the San Domingo Mines, the old workings extending over a length of nearly three-quarters of a mile, having a width of from 6 to 54 ft., comparing favourably with those of the other mines of the province. Some pillars of ore left by the Romans when worked out gave several hundred tons of ore of the following composition:—Lead, 23 per cent.; zinc, 30 per cent.; copper, 4 per cent.; sulphur, 23 per cent.; silver, 10 ozs. per ton; besides a little gold. These mixed ores were formerly of little value, owing to the difficulty of separating the metals. This difficulty has now been entirely overcome, the result being that they will realise, even at the present low price, about £4 10s. per ton.

Mr. Rickard states it has come to his knowledge that in opening up a lode of a similar character between the Rio Malagon Mines and Mason and Barry Mine, ore was found in good quantities of 80 ozs. of silver and upwards to the ton. There is, therefore, a prospect, when the workings of this mine are carried deeper, that the ores may prove equally rich.

The Chairman of this company, Mr. John Dixon, C.E., who was engaged for some years in constructing extensive works for the Rio Tinto Company, has expressed his views with regard to the mines of this Company (with which he is well acquainted, as well as with the San Domingo and Tharsis Mines) in a letter, copy of which accompanies the prospectus.

The vendors undertake to show a good title to a lease for an unlimited term on the following conditions:—A royalty of 4s. per ton of ore extracted containing not more than 12 ozs. of silver, with an addition of 3d. per oz. per ton, yielding over 12 ozs., and up to 20 ozs. of silver, and if beyond 20 ozs. of silver, then 6d. per ounce additional royalty for each ounce of silver over 20 ozs. The lessee is allowed 18 months from 23rd May, 1881, to open up the mines, after which the royalty is to be paid on 3000 tons of ore per annum as a minimum. A full copy of the original agreement is contained among the contracts undermentioned, and can be seen by any subscriber.

The capital of the company is £200,000, of which £120,000 only will be first issued, the balance remaining available for future extensions.

The price to be paid to the vendors (who are the promoters of the company) for this very valuable property, including the benefit of the important contract with Messrs. Richards, Power, and Co. before mentioned, is £30,000 in cash and £20,000 in fully paid-up shares of the company; and if in any year during the first five years the profits be not sufficient to pay dividends of 10 per cent. per annum on the paid up capital of the remaining shares, such £20,000 vendors' shares will not be entitled for that year to receive any dividends whatever.

The directors have stipulated with the vendors, and they have agreed, that no portion of the purchse money is to be paid over, and that the whole of the capital subscribed shall be held intact until the directors have received the report of an independent engineer, to be selected and dispatched by themselves to inspect the property. The preliminary expenses payable by the company will be strictly limited to the actual outlay incurred for printing, advertising, legal charges, &c.; but unless the engineer's report is satisfactory to the board the entire capital subscribed will be returned to the shareholders, less one moiety of the actual expenses incurred by the company, the vendors having agreed in that case to bear and defray the other moiety.

The working capital proposed is considered to be ample for opening out and developing this important property.

The arrangement made with Messrs. Richards, Power, and Co. will, it is believed, on the basis above referred to, probably result in net profits to the company of about £26,400 per annum, equal to a dividend of 22 per cent. per annum upon the present issue of capital. It will be seen, therefore, that the undertaking is of an entirely exceptional character.

As an indication of the market values of the adjacent mining properties, the following table is appended:—

Name of Company.	Amount paid per share.	Present Quotation per Share.	Total Paid-up Share Capital.	Present Market value.
The Rio Tinto (Sulphur and Copper) Company (Limited)	£10	£19 —£20	£2,250,000	£4,387,500
The Tharsis Sulphur and Copper Company (Limited)	10	42½— 43½	899,300	4,631,392
Mason and Barry (Limited)	10	£18	1,851,640	3,332,955

Application will be made to the London Stock Exchange for an official quotation of the shares of the company.

In the event of no allotment being made the deposit paid on application will be returned in full.

The following are the contracts entered into:—An agreement dated 23rd May, 1881, for a lease, and made between George Ricken of the one part, and Percy Frederick Tarbutt and Cecil Quentin (by C. S. Nicol, their agent and attorney), of the other part; a contract between Messrs. Richards, Power, and Co., of Swansea, and the said Messrs. Tarbutt and Quentin, dated 30th June, 1881; a contract between the said Messrs. Tarbutt and Quentin of the one part, and the London Agency (Limited) of the other part, dated 15th July, 1881, having an endorsement thereon dated 20th July, 1881; and a contract between the London Agency (Limited) of the one part, and the Rio Malagon Sulphur-Copper and Silver Mines (Limited) of the other part, dated 20th July, 1881. All which for further particulars may be seen, with the Memorandum and Articles of Association, at the offices of the solicitors to the company.

Applications for shares must be made in the form annexed to the prospectus, accompanied by a deposit of £1 per share, which can be forwarded to the bankers of the company, or the Secretary at the offices of the company, from any of whom prospectuses and forms of application can be obtained.

By order of the Board,
CHARLES WATKINS, Secretary.
46, Queen Victoria-street, London, E.C., 20th July, 1881.

THE PENEGARREG SILVER-LEAD MINING COMPANY (LIMITED).

The LIST of APPLICATIONS for SHARES in this Company will be CLOSED both for LONDON and the COUNTRY on WEDNESDAY NEXT, the 27th July, 1881.

By order.

The Penegarreg Silver-Lead Mining Company, Limited.

INCORPORATED UNDER THE COMPANIES ACTS 1862 TO 1880.

CAPITAL £20,000, IN 20,000 SHARES OF £1 EACH.

Of which 6500 will be allotted to the vendor in part payment for the property and machinery, 5000 are reserved for future issue, if required, and the balance, 8500, are now offered for subscription at par.

Payments as follows:—2s. on application, 3s. on allotment, 5s. one month after allotment, and the balance by instalments of 5s. at intervals of one month.

DIRECTORS.

GEORGE BROCKELBANK, Esq., Chairman, Chairman Wheal Hony and Trelawny United Silver-Lead Mining Company (Limited), and Director General Steam Navigation Company.
JOHN ROMANES, Esq., Director Wheal Hony and Trelawny United Silver-Lead Mining Company (Limited), and Malta and Mediterranean Gas Company (Limited).
*EDWARD PALMER, Esq., Director Wheal Hony and Trelawny United Silver-Lead Mining Company (Limited).

* This gentleman will join the Board on completion of purchase.

BANKERS—Messrs. MARTIN and Co., 68, Lombard Street, London. Messrs. D. JONES and CO., Llandilo, Llandovery and Lampeter.
SOLICITORS—Messrs. FREDK. W. SNELL and GREENIP, 1, George Street, Mansion House, E.C., London.
SECRETARY—Mr. H. R. LEWIS.
OFFICES—BARTHOLOMEW HOUSE, BARTHOLOMEW LANE, E.C., LONDON.

PROSPECTUS.

This company is formed for the purpose of purchasing the lease, valuable machinery, stock, &c., and for working the mines, veins, seams of lead, and all other metallic ores in and under farms and lands, containing 201 acres, and known as Penegarreg, Cellynfaur, and Bwlchyrhyd, situate in the parishes of Talley and Llansawel, in the county of Carmarthen.

The property is held under lease, dated 16th November, 1878, for twenty-one years. The yearly rental is 20*l.*, merging into a royalty of one-sixteenth.

The sett is very extensive, running about one mile east to west on the course of the lodes, and the same extent north and south and contains four well defined lodes, three of which (see Captain Rowe's report) have been intersected by cross-cuts from No. 2 level. These lodes are a continuation westwards of the celebrated lodes worked by a private company at Nant-y-Mwyn, which are stated to have returned immense profits and have been in operation more than half a century.

The amount of work which has been already done is very considerable. A deep level has been driven upwards of 250 fathoms in length, which effectually drains the present workings; two other levels have been driven above this, and a shaft has been sunk from the surface, about 40 fathoms deep, connecting all these together.

Machinery, entirely new, upon the most improved principle, comprising 30-horse power steam engine, with Root's patent boiler, powerful crushing mill and elevator, four patent jiggers with classifiers, each with three compartments, flat and round buddles, &c., has been erected within the last twelve months at a cost of upwards of 3000*l.* for effectually and economically crushing and dressing 100 tons of lead ore per ton. The buildings are of stone and most substantially erected, combining engine and boiler-house, stone-breaking and crushing-houses, jigging and dressing floors, with all the appurtenances for making regular returns of dressed ore. Also smiths' and carpenters' shops.

Captains Richard Rowe, Walter Eddy, Wm. Hancock, Wm. Bryant, John Williams, and Joseph Evans have inspected and reported upon this property. Full copies of their reports may be seen at the offices of the company, together with a report made by R. J. Frecheville, Esq., made previous to his appointment as Her Majesty's Inspector of Mines for Cornwall.

CAPTAIN ROWE, formerly of the Great Laxey Mine, says:—"These are in brief the prospects which the mine now presents, and judging deliberately from them, all that appears to be wanting is the intersection of these three lodes and opening them out at the deep adit level, and as there is every reason to believe they will carry down at that and still greater depth those fine appearances of ore they are showing above, there is nothing that I can see to hinder this mine resulting early in being one of the greatest successes of the day."

R. J. FRECHEVILLE, Esq., states:—"The killas, which forms the country rock end of the elvan course, which is in close proximity to your mines, are favourable indications to this class of mine. The conditions of working are favourable. I think from what I have seen that you have a valuable property."

CAPTAIN WILLIAM HANCOCK, of the Wheal Hony and Trelawny silver-lead mines, writes:—"The mine is, in my opinion, when properly developed, capable of producing silver-lead ore in large quantities, and you will be amply remunerated for your outlay. I may add that there is a considerable quantity of ground opened that would pay to work on tribute."

CAPTAIN T. W. BRYANT observes:—"For the situation of the property, the facilities for speedy development, together with the similarity of stratification to that of other lead producing localities, you have in this mine a capital property; and I am of opinion is well worth the consideration of capitalists as a good investment. I have confidence in recommending it as such."

CAPTAIN JOSEPH EVANS writes:—"The mine is situate between two of the most valuable lead mines in South Wales, the Nant-y-Mwyn and the Llanfrynnch, which are now producing very large returns. I have no hesitation in saying that your mine will become one of the best dividend paying mines in the Principality."

CAPTAIN WALTER EDDY says:—"Looking at the promising appearance of the lodes nt different points, I think further development of them in depth and length a good and legitimate speculation, holding out encouraging prospects of success."

CAPTAIN WILLIAMS states:—"I observe you have erected new and powerful machinery of a first-class character, and if you extend your workings below the bottom level you will find the lodes, already proved, will increase in value far beyond anything you have seen in the upper levels."

The directors have secured this property from the present vendor on very moderate terms, representing, in fact, the outlay in development of the mine and cost of the machinery.

Immediate returns can be made from the present development of the mines, but the directors are of opinion that with the judicious expenditure of the further capital proposed to be raised, the mines, in the course of six months, by energetic working and driving on the course of the lodes, will be able to produce continuous returns that will allow of good and steady dividends.

The vendor has agreed to dispose of his interest for £10,000, of which £3500 is to be in cash upon transfer and the balance in 6500 shares of £1 each fully paid up.

The only contract entered into on behalf of the company is dated the 14th July, 1881, and is made between Edward Palmer of the one part and Edward Cook on behalf of the company of the other part, being the contract for the purchase of the property and plant, which together with the Articles of Association, may be seen at the offices of the company.

Applications for shares may be made to the bankers on the form enclosed herewith, or to the secretary of the company.

Prospectuses and Forms of Application for shares may be obtained at the offices of the company, or of the bankers.

The preliminary expenses will be confined to the amount expended in the formation and registration of the company.

18th July, 1881.

THE PENEGARREG SILVER-LEAD MINING COMPANY (LIMITED).

Incorporated under the Joint Stock Companies' Acts, 1862 to 1880.

To the Directors of the Penegarreg Silver-Lead Mining Company (Limited).

GENTLEMEN,—Having paid to your bankers, Messrs. Martin and Co., No. 68, Lombard-street, London, the sum of £ , being a deposit of 2s. per share on shares, I hereby request you to allot me shares in the above company, and I agree to accept such shares, or any less number you may allot me, to pay the sum of 3s. per share on allotment, 5s. per share one month after allotment, and the balance by instalments of 5s. each on each share, at intervals of one month; and I authorise you to place my name on the register of shareholders in respect of such shares.

Name in full.....
Address .....
Description .....
Signature .....

Date.....18 1.

Lectures on Practical Mining in Germany.

CLAUSTHAL MINING SCHOOL NOTES—No. CLXXVI.*

BY J. CLARK JEFFERSON, A.R.S.M., WH. SC.,
Mining Engineer, Wakefield.
(Formerly Student at the Royal Bergakademie, Clausthal.)

[The Author reserves the right of reproduction.]

We have in the earlier part of this section discussed the physical laws referring to the friction of air currents in mines, and the theoretical deductions therefrom regarding the splitting of the main into several currents, so that we have here to add only some general remarks as to the actual practice followed in the distribution of the air currents.

One of the first and fundemental rules to be followed is that "the intake current shall be carried at once to the lowest level in the mine, and thence led through the workings, always in an ascending direction." It will be evident to our readers that this rule is intended chiefly for metalliferous mines, or coal mines having a great inclination, where the main roadways are not on the same level. Where the coal seams (as in this country) are approximately level the above rule can scarcely be said to be applicable. It is deduced from two considerations. First, the intake current is supposed to be always cooler than the return; its temperature is gradually raised as it passes through the workings. The air current has, therefore, a natural tendency to ascend whilst passing through the workings, and by making the direction of the current to coincide with this natural tendency the current is materially assisted by the latter, whilst in the reverse direction it would be opposed by it. Secondly, in mines containing fire-damp, this being lighter than the air, it will tend to rise, and if the direction of the air current is ascensional this tendency will help the current to remove it; whilst, on the other hand, if the direction of the current be downwards the natural tendency of the air to rise will oppose its removal by the air current. In metalliferous and highly inclined mines, where the levels are connected by means of numerous shafts, the above rule must be strictly followed out, unless a great loss of air is suffered to take place; and where the opposite is carried out in practice the lowest and most removed working places will be left with little or no current at all, the current escaping upwards through the winzes, and the interstices in the packed attle stopes. The loss of air is very considerable. M. Gonot found that in the pits No. 2 of Vingt-Quatre Actions only one-third of the ventilation actually passed over the working faces; and at the Good Hope pit, near Charleroi, M. Joachims found that the loss of ventilation amounted to one-half; the proportion varying but slightly with an increased speed of ventilator and the amount of ventilation.

The division of the air current is advantageous, both on account of economy of ventilating power and the safety of the mine. The former has been sufficiently demonstrated when treating on the friction of air in mines. The safety of a mine is increased not only on account of the important fact that a greater amount of ventilation is obtained with the same power, but also because the fire-damp given off from one set of workings is not passed through the others, but direct to the returns, thereby diminishing the liability of its ignition; and even should an explosion occur its effects are confined chiefly to the workings ventilated by the split in question. A minor advantage lies in the fact that the velocity of the air current can be made much less, and there is less liability of the flame being forced through the gauze of the safety-lamp, which happens with a velocity of 5 ft. per second, whilst about half that speed is inconvenient for the colliers in the working places. Of course the speed of the current in the main intake and returns should not be limited by the above; there will be little liability of the presence of an explosive mixture in the intake, and special rules and precautions should be taken at all times with reference to travelling in and the use of lights in the returns. As we have previously mentioned, the subdivision of the air current may be carried too far; for should the current be too weak it will fail to cause the rapid mechanical mixture of the light carburetted hydrogen with the current, which is necessary to prevent a lodgement of gas in the higher parts of the workings, since diffusion acts too slowly to be of practical use.

Since the air currents will pass through the various splits in such a manner that the total resistance met with is a minimum, the division should be so effected that the amount passing through each split, and the resistance met with in each split, are the same. Although this result can only be attained in an approximate manner, still a great economy will be attained if this aim is kept in view in laying out the various workings, or rather in dividing the current amongst the workings. As this result cannot be obtained merely by an arrangement of the roadways, which require to be constantly altered for other purposes, a regulation of the air current must take place. This regulation is effected by blocking up part or the whole of the sectional area of some of the roadways. Moreover, as it often happens, it may be necessary to block up the whole sectional area of the roadway for the purposes of ventilation, whilst at the same time it is required to be kept open for the conveyance of the mineral.

When it is necessary to stop up only a portion of the sectional area of the roadway, especially if it is still to be used for conveyance, the simplest means is to attach a sheet of brattice cloth (of the required size) to a brattice pole fixed close to the roof, the ends of the pole being wedged in notches cut in the sides. A sheet of brattice cloth thus suspended covering the top third or half of the sectional area of the roadway has the disadvantage that it is liable to be torn down by horses passing beneath, and constantly requires putting up again. If the roadway is wide enough, the necessary contraction of the section may be obtained by fixing two vertical brattice props at a sufficient distance apart to readily allow of the passage of a horse and corf, and to fix brattice cloth from each prop to the adjoining side of the coal. This arrangement requires more time in fixing, and the brattice nails driven into the coal side are liable to give way if the brattice cloth is knocked against, Only in the case of roads not used for conveyance will walling or boarding be resorted to for closing part of the section of a roadway.

When it is required to block up the whole sectional area of the roadway this may be done either with brattice cloth, wood, or walling. With brattice cloth the usual arrangement is to place two uprights, a cross piece or cap, as close as possible to the sides and roof respectively. Often the sides and the roof are dressed approximately straight by means of the pick, if the place purposely chosen is not sufficiently rectangular in section. The brattice cloth is nailed to the frame thus formed on the side from which the air current comes. When two sheets are used it is better to nail them both on this side. When the roadway is used for travelling and the conveyance of mineral the two uprights are placed at some little distance from the sides, but at a sufficient distance apart to allow of the passage of a horse and corf. Brattice cloth is nailed tight, covering the space between the uprights and the sides of the coal. The space between the uprights is covered by a sheet of brattice cloth nailed at the top only to the cross piece. The sheet is made long enough to reach the floor, and somewhat broader than the width between the uprights. This sheet is attached on the wind side of the frame. When the air current is so strong that it is liable to blow open the brattice sheet it will be necessary to nail the lower end of the sheet to a light brattice pole, somewhat longer than the width between the two uprights. Of course the sheet is then not so readily raised for the passage of men and horses. In some of the continental mines a cord is attached to the pole at the lower end, and passed through four or five holes in or loops attached to the brattice sheet, and over a small pully fixed close to the roof. A boy holding the loose end of the cord readily raises the sheet for the passage of men and horses.

When the roadway to be blocked for the air current is one of the principal roadways of the mine the above means are not sufficiently solid and permanent. In this case wooden stoppings or doors will be used. The wooden stopping will be formed by inserting a door-set, or frame piece, as above described, and nailing boards to them. Two thicknesses of boards may be used placed so that one set covers the joints of the other. This arrangement is not very usual, and if wood is used the general practice is to fix up doors, although the blocking up of the roadway may be intended to be permanent. Doors used in mines are generally classed as main doors, or trap doors. The same mode of construction is mostly used for both, the distinction of the names refering rather to the purpose than the construction of the doors. Main doors are employed for diverting the main current, and two, and even three, doors are used together, being placed at such a distance apart that there is room between the two doors for a horse and one or two corves, or even a train of corves, when connected together. On this account it is never necessary to have two doors open together when a set of corves are passing through; the first door being closed after the passage of the corves through it before the second is open. Where one door between the air currents is considered insufficient three doors are used, so that there are always two of the doors closed when one is opened. The doors, which must be put up in a very solid manner, are constructed as follows, the description referring to the construction of trap doors also. The sides, roof, and floor are dressed with the pick for a yard or two on each side of the position chosen for the door. A niche is cut in the sides, roof, and floor for the reception of the two uprights and two cross pieces; the two uprights and top cross-piece being recessed to half their thickness in the coal, and the floor cross piece to its full thickness in the floor. In some cases the coal is dressed away to the outside dimensions of the door frame on the wind side of the frame, the coal on the opposite side being dressed away to somewhat less than the inside dimensions of the door frame. A ledge is thus formed slightly deeper all round than the depth of the pieces forming the frame. The frame is then wedged tight in position by driving the wedges close to the sides and the roof. Where the breadth of the roadway is much greater than the width of the door the erection of the door is somewhat different. A niche is cut in the roof and floor, and the two cross pieces extending the whole width of the roadway are inserted therein. The floor cross piece is sunk to its full depth, whilst the coal at the roof is dressed off on the wind side of the door, so as to expose the whole depth of the roof piece for a length slightly greater than the width of the door. Two uprights are then inserted between these to complete the door frame, and are placed at such a distance apart as to allow of horses and corves passing through. The space between the uprights and the sides of the coal are bricked up and plastered on both sides, so as to make the brickwork air-tight. The door, which is formed of two thicknesses of boarding, laid so as to break joint, or one set running vertically and the other horizontally, is of nearly the same dimensions as the outside of the frame, and hung by a couple of strong hinges. These doors are always made to fall to by their own weight. In order that this shall occur the hinge post, or more accurately the straight line drawn through the two hinges, must be inclined at the roof from the wind side of the door, and also at the roof from the hinged side of the door frame. It is, perhaps, most usual to place the door frame perfectly vertical, and to make the door close by its own weight, by making the lower hinge stand out further from the frame than the upper, and to place it slightly further from the centre of the door than the upper hinge. The latter condition is necessary to cause the door to swing to when opened beyond the position at which it would otherwise be at right angles to the plane of the door. This latter condition is not fulfilled in many cases, so that the door would not swing to when opened to its extreme position against the sides of the coal; and hence to prevent its being opened too wide it is very usual to fix a short stump in the floor.

* Being Notes on a Course of Lectures on Mining, delivered by Herr Bergrath Dr. VON GRODDECK, Director of the Royal Bergakademie, Clausthal, The Harz North Germany.

COLLIERY EXPLOSIONS AND COAL DUST.

For some time past many gentlemen connected with colliery operations have entertained the opinion that explosions of fire-damp are sometimes intensified by the fine coal dust which might be suspended in the atmosphere, and a parliamentary paper just issued not only affirms the possibility of coal-dust intensifying the explosion, but that any dust, even calcined magnesia, will act in the same way. By direction of the Home Secretary the chemist to the War Department, Mr. Abel, C.B., F.R.S., experimented and reported upon some samples of dust collected in the Seaham Colliery workings after the explosion in September last. Mr. Abel states that the samples, 13 in number, which were sent to Woolwich, were in the first instance dried at a temperature of 100° Fahr., and then passed through a sieve of 50 meshes to the inch, so as to remove the coarser particles, which in some instances existed in very large proportions in the specimens. The samples were compared with each other, and also with samples of coal-dust obtained from various collieries at which serious explosions had recently occurred, with respect to the proportion of fire-damp to air which a suspension of each particular sample in the gas-mixture would cause to be exploded readily by contact with the naked flame of a Davy lamp.

The richness of a dust in coal, or its greater inflammability, influenced the rapidity and consequent violence of the explosion of dust and gas mixtures containing corresponding quantities of fire-damp but Mr. Abel ascertained that the physical characters and mechanical condition (lightness, porosity, and state of division) evidently contribute more than the richness in coal or combustibility of the dust-sample, to determine the comparative readiness with which it brings about the inflammation of a gas-mixture not susceptible of ignition *per se* under otherwise similar conditions, and to regulate the proportion of gas required to produce, with it, a mixture which will ignite and convey flame, when coming into contact with flame. This is strikingly illustrated by the fact that the sample of Seaham dust containing the smallest proportion of coal, and consisting, indeed, of nearly half its weight of non-combustible matter, ranked next in sensitiveness to the samples which consisted almost entirely, or chiefly, of coal. The results obtained with this particular dust led him to try whether the ignition by a lamp-flame of a mixture of fire-damp and air, not inflammable *per se*, would be brought about by suspending in it a fine readily-floating dust which was quite non-combustible, and not susceptible of any chemical change by exposure to a high temperature. The powder answering to these conditions, which was most readily procurable when this experiment suggested itself, was calcined magnesia. A gas-mixture having 3 per cent. of fire-damp was allowed to pass a lamp-flame at a velocity of 600 ft. per minute for some time; no result was produced, but on causing it to convey calcined magnesia in suspension long flares of flame were produced within a few seconds of the mixture first passing the lamp, and the inflammation speedily spread throughout the gallery with feeble explosive effect. With only 2¾ per cent. of gas results quite similar were produced, the general ignition following, however, less rapidly after the first production of the flares in front of the lamp-flame. With another sample of calcined magnesia, which was not quite so light as the first one, a corresponding result was obtained with a mixture containing 3 per cent. of fire-damp. In a still atmosphere containing 2½ per cent. of coal gas one of the most sensitive of the Seaham dusts when suspended in it produced ignition of the mixture with no explosive effect. A corresponding result was produced by suspending calcined magnesia in a still atmosphere containing 3 per cent. of gas. It will be seen from these results that the perfectly non-combustible powder, magnesia, is in its power to bring about the ignition of an otherwise uninflammable mixture of fire-damp or coal gas and air, little inferior to the most inflammable and sensitive of the Seaham dust samples. Other non-combustible powders gave similar results.

The sensitiveness to ignition of a mixture of air with a small proportion of fire-damp is considerably increased if the source of heat be increased, and the result of Mr. Abel's experiments with Seaham and other dusts appear to have demonstrated that coal-dust in mines not only much promotes and extends explosions in mines by reason of the rapid inflammability of the finely-divided combustible, and of the readiness with which it becomes and remains suspended in air-currents; but that it may also be itself readily brought into operation as a fiercely-burning agent which will carry flame rapidly as far as its mixture with air extends, and will operate even as an exploding agent, through the medium of a proportion of fire-damp in the air of the mine, the existence of which, in the absence of the dust, would not be attended by any danger. That dust in coal mines, quite apart from any inflammability which it may possess, can operate in a distinct manner, as a finely-divided solid, in determining the ignition of mixtures of only small proportions of fire-damp and air, and, consequently, in developing explosive effects; and that a particular dust in a mine may, therefore, be a source of danger, even though it contains only a small proportion of coal or combustible matter. Although the explosion which may occur through the agency even of a non-combustible powder, in the manner described, may be of very mild or feeble character in the first instance, it may be almost at once increased in magnitude and violence by coal-dust which the first ignition will raise and bring into action.

RAILWAY AND GENERAL MARKETS.—Referring to the course of business done to-day during official hours (11 to 3) Mr. Ferdinand R. Kirk, 5, Birchin-lane, writes:—*Opening:* Grand Trunks maintain yesterday's rise, and the good traffic return induces purchases to be made more freely. The American market is steadier. Reading shares realise $30, and Penns $66. Atlantic Thirds are 13*l*. Pestarena, ⅛ to ¼; New Quebrada, 4 to 4½; Richmond, 15½ to 16; Eberhardt, 10s. to 15s.; La Plata, 1⅛ to 1¼. North-Eastern are stationary at 166½, and Great Eastern at 71¼.—*Closing:* Trunks maintain a firm appearance, but most of the other markets have suffered a relapse. Turks are only 15¼. Atlantic Bonds are now unchanged. Erics, $44⅝ to $44⅞; Peruvian Fives, 17⅛ to 18; Sixes, 21½ to 22; Pestarena, ⅛ to ¼; Port Phillip, ¼ to ⅜; Polrose, ⅜ to ⅝; Potosi, 1 1/16 to 1 3/16.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, has been in Bahia (Limited), 18; European, new, 9⅛ to 9¾; Gaslight and Coke, A ord., 180 to 182½; ditto H, 7 per cent. max., 135¾ to 137; Imperial Continental, 190 to 191; London, 192; Malta and Mediterranean, 2⅛; Monte Video, 14¾ to 15; Oriental (Limited), 7; ditto new, 6⅛; ditto new, 1879, 1⅛; Rio de Janeiro (Limited), 25⅛; South Metropolitan, B, 179½ to 182½. For closing prices see list on the last page of Journal.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance, British and Foreign, 38¾ to 39⅛; Alliance Marine, 29½; City of London Fire, 1⅝ to 1⅞; Commercial Union, 26; Employers' Liability, 1 13/16 to 1⅞; Fire Insurance Association, 4⅜ to 4 5/16; Indemnity Marine, 130 to 131; London and Staffordshire Fire, 1½ to 1¾; Marine (Limited), 28; Royal Exchange, 415; Universal Marine, 8¼. For closing prices see list on the last page of Journal.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. W. ABBOTT, of Tokenhouse-yard, are given in tabular form in the 12th page of Journal.

MARKE VALLEY.—At the meeting, on Wednesday (Mr. W. Bellingham in the chair), the accounts from April 22 to July 20 showed a debit balance of 851*l*. 17s. 10d., and a balance of assets over liabilities of 73*l*. 7s. 8d. A call of 5s. per share was made. Capts. George and Renals, after reporting on the various points of operation, state that they have at present 16 pitches working by 35 men, at tributes varying from 10s. to 13s. 4d. in 1*l*., and two stopes by eight men, yielding 6 tons of ore per fathom. As to Wheal Jenkin, they say: We are pleased to say that although we have had a far more troublesome job than we expected, we have now cleared and secured the adit for about 160 fathoms, and have succeeded so far as to enable us to examine a portion of the workings on the lode, which we find very extensive; the lode itself appears to be from 5 to 7 fms. wide, and from six samples broken in different parts over this width the assays give an average produce of 1 cwt. 0 qr. 5 lbs. of tin to the ton of stuff. These workings were suspended over 40 years ago, when the price of tin was about from 30*l*. to 35*l*. per ton. We look upon this as a very important addition to the mine, and shall spare no effort in getting the adit further cleared to let down the water as early as possible to admit of our making a more thorough inspection than we have yet been able to do.

THE PATELEY BRIDGE COMPANY.—An extraordinary general meeting of shareholders was held at the offices of the company, Austin Friars, on Tuesday, when the following resolutions passed at the extraordinary general meeting held July 1 were confirmed:—"That it is absolutely necessary, to secure the success of the Pateley Bridge Company (Limited), that additional capital should be raised for the purpose of paying the debts of the company, and enabling the property of the company to be explored and worked in an efficient manner. That the directers be, and hereby are, authorised to raise such sums of money as they may deem expedient for that purpose by reconstructing the company, either with or without making provision for the present shareholders having an interest in such reconstructed company in proportion to the shares held by them in the present company or not, or by such other means as they may deem practicable." That the directors be and hereby are authorised to sell, lease, or otherwise dispose of the mines and property of the company upon such terms as they may think fit."

EUREKA (NEVADA) MINING DISTRICT.

[TO THE EDITOR OF THE MINING JOURNAL.]

SIR,—I have the pleasure to hand you my usual budget of news from this locality:—

Some needed repairs are being made at the Eureka Consolidated Works, but the furnaces will not be closed down.

Including the present month the Eureka Consolidated Mining Company has paid $4,655,000 in dividends.

Business looks very lively about the Richmond Works. They have a large number of men employed in making repairs—at the refinery and furnaces.

B. C. Levy, superintendent of the Bowman Mine, informed the Sentinel last evening that a rich and important discovery had been made in the property within the past few days, which will not only be particularly gratifying to the stockholders in Boston, but will also have a highly important bearing upon a piece of territory in this camp, to which but comparatively little notice has been given in the past. The strike was made in two parts of the mine. The first was made 3 ft. from the main shaft on the 50 ft. level. Here a ledge was encountered 3 ft wide, and displaying ore which assayed $65 in gold, and $93 in silver. On the 113 ft. level a drift was run 20 ft., and it is believed the same ledge has been struck. It is narrower, however, being only 18 in. wide, but is corresponding richer, the ore assaying $216 in gold and $47 in silver. The shaft is 100 ft deeper, and a drift is being run from that point to intercept the vein. The ore so far disclosed is different from that of Ruby Hill Mines, and is clear of galena being of a milling nature. This appears to be somewhat strange, as the Bowman adjoins the Richmond on the north, is distant only 2000 ft. in a direct line from the latter's main shaft. Mr. Lavy is highly elated at the strike, and believes he has developed a real bonanza for his moneyed friends at the Hub.

It is rumoured that a large quantity of mining property, consisting of the Prospect Mountain Tunnel and its belongings, with several mines in the vicinity of the Tunnel, has been consolidated, and sold to an English company. The would make a large and valuable property.

We have it from pretty good authority that a genuine bonanza has been struck in the Geddes and Bertrand Mine. On the 300 ft. level a drift from the tunnel has encountered a body of ore of immense dimensions. It has been penetrated a distance of 60 ft., and there is no footwall in sight. Our informant states that an intelligent miner estimated the amount of ore in view at 500,000,000 tons. This is an enormous amount, and we fear is very much exaggerated, as the ore is said to average $300 a ton, which would made the bonanza worth $150,000,000. Mr. Clark, the superintendent of the mine, has gone to Salt Lake, with view of inducing the proprietors of the property to erect a mill at once. The main shaft of the mine in the meantime is being sunk 100 ft. deeper. In Secret Canyon the news of the great strike is the general theme of conversation, and a great boom is expected for that region.

Kohoma, Colorado, has a woman prospector in the person of Mrs. Josie Smith, who is an expert with the pick and shovel, and is working daily in a tunnel on the Lady Prospect, a lode which she located herself.

Large quantities of wood are being hauled in, and stowed away for winter use. As soon as we get our new railroad the occupation of the wood-haulers will be gone.

It is reported that work will be started on the Jackson Mine on the 15th of next month. We hardly think such will be case.

Some very rich ore was brought in from the Reeves and Berry Mine yesterday. It was taken from a depth of only 50 feet.

A large amount of stone, for re-lining the Ruby and Dunderberg furnace, was brought in yesterday afternoon from the Pancake Quarry.

Everything is running smoothly at the works of the Ruby and Dunderberg, and they doing good smelting.

The New York Financial and Mining News tells the following good story:—"I wish you would tell me all about the way men get gold and silver out of a mine, my dear," said a lady in Brooklyn to her husband the other evening, as he peeled off his coat and sat down in three chairs for the evening. "I always thought they bored into the ground with a pay streak until they found the shaft, and then they drifted for the assessment, and when they found that they just put a blast in the indications, and salted the dump. Now it seems that you don't do it that way. You follow up the micacious slate until you strike the bias-fold. Then you see if you can find a colour that matches the copper-stained trilobites that you prospect, and you—" "No, I must stop you there. You are getting a little off the vein. You probably have the right idea, but you are using terms that are not correct. After they get the wall rock on the dump and pinch out the night shift, they salt the contact, and blast out the vertical chilblain. Then they drift for the blossom rock, baled hay and poverty till they strike the varicose vein. After that it has a short job to put on the bias-fold and sample the stockholders where bituminous duplex bisects the brocaded porphyry and scallops the gouge with cross-eyed shirrings and bicarbonate of bilious ore interlaced with moire antique wads of free copper and free milling erysipelas. This is not always the case, however, for directly or inversely, perhaps more or something less, as the case may be, and still we might or might not, according to whether we did or not, but also besides, if not always, as already described, perhaps, yet I wouldn't be positive about anything which might be doubtful." Then he laughed a cold hard laugh, and went to bed. If thousands would only explain these things to their wives how much pleasanter our homes would be.

There is hope for the Bodie guzzler yet, says the Free Press. The other day a man was taken to a New York hospital suffering from an acute attack of delirium tremens. He had never taken a drink of spiritous liquors in his life. The physicians pronounced it a case of tremens from the excessive use of tobacco.

London, July 20. RUBY HILL.

NEW BRONFLOYD COMPANY (Limited).—A petition by a creditor and shareholder to wind up the company has been presented, and the usual compulsory order made and a provisional liquidator appointed. Mr. Romer, Q.C., and Mr. Solomon were the counsel appearing. [The Master of the Rolls has appointed Mr. B. P. Daniels provisional official liquidator of the New Bronfloyd Company (Limited).]

ISSUE AT PAR OF £120,000 IN FIRST MORTGAGE SEVEN PER CENT. DEBENTURE BONDS OF THE

Queensland Land and Coal Company

(LIMITED).

To be secured by a First Mortgage on the Freehold Lands, Property, Plant, and Coal Fields of the Company, the great value of which will be seen from the Government Report of Mr. A. C. Gregory, C.M.G., Government Geological Surveyor.

The Government has recognised the great importance of these Coal Fields, and has such confidence in their future that the Queensland Parliament has voted the sum of £54,000 for the express purpose of the construction of a railway from the company's property to the port and railway terminus of Maryborough, a distance of 18 miles.

PRINCIPAL redeemable at Par with a Bonus of £10 per cent. by annual drawings commencing in 1885.

INTEREST at the rate of 7 per cent. per annum, payable on the 1st January and 1st July in each year, commencing with the 1st January, 1882, at the Company's Bankers in London. The interest being calculated on the amount paid up.

DEBENTURE BONDS, with Interest Coupons attached, will be issued for sums of £20, £50, £100, £200, and £500 per Bond, after payment of the last instalment, due 30th April, 1882.

Scrip Certificates will be issued against delivery of the Allotment Letters and Bankers' Receipts, and exchanged for the Bonds after 30th April, 1882.

ISSUE AT PAR.

PAYABLE:—10 per cent. on application.
20 „ „ allotment.
20 „ „ 31st October, 1881.
25 „ „ 31st January, 1882.
25 „ „ 30th April, 1882.

} Subscribers will be allowed to pay instalments in advance, receiving interest thereon at the rate of 4 per cent. per annum.

The Debenture Holders will have the right to exchange their Debentures for fully paid shares of the company (which have been reserved for that purpose), equivalent to the amount of the Debentures and Bonus of £10 per cent.; but if they avail themselves of this right they must do so immediately after the payment of any half-yearly Coupon falling due before the 2nd January, 1885.

TRUSTEES FOR THE DEBENTURE HOLDERS.

Sir JOHN BAYLEY DARVALL, K.C.M.G., late Attorney-General for N.S. Wales (Director of the Bank of Australasia).
The Hon. ARTHUR MACALISTER, C.M.G., Agent-General for the Colony of Queensland, 1, Westminster Chambers, S.W.
BANKERS—Messrs. MARTIN and Co., 68, Lombard Street, E.C.

The Directors of the Queensland Land and Coal Company (Limited) offer for subscription at par £120,000 in debentures, which will form a first mortgage upon the whole of the freehold lands, collieries, property, plant, and effects of the Queensland Land and Coal Company (Limited), which will be duly vested in the names of the trustees.

These debentures bear interest at the rate of 7 per cent. per annum, payable on the 1st January and 1st July in each year at the company's Banker's in London, and are redeemable at par with a bonus of £10 per cent. by yearly drawings commencing in 1885.

The directors have power to set aside one-half of the net profits in each year up to £10,000, if they deem it expedient, to provide for the redemption of these debentures.

Application will be made to the London Stock Exchange for an official quotation of the debentures.

Full particulars can be obtained upon application to the Secretary at the company's office, 46, Queen Victoria-street, E.C.

FOREIGN MINES.

DON PEDRO.—Mine captain's letter, dated June 18: Drainage: The 11-in. lift is completed, and put to work on the 13th; a good deal of trouble was caused by the wood pumps being dry and decayed, requiring a good deal of caulking and careful handling, the lift now being 143 ft. long; since put to work we have drained 40 ft., when idle water rose 31 ft., reforked same, and 9 ft. below; one joint wedged to-day, and stopped the worst of the "blow" in this joint by going to neck in water to do so. Jack-head lifting much better since. We have put in four new legs in the adit level, two sides lathed, eight props and head boards put in and wedged firmly, tramroad repaired in places, and many other minor repairs made. The machinery continues to work regularly, but slowly, although an improvement is made in speed by cisterns being raised and new packings put in, also the engine drivers are getting more practical with their work. Air-pipes sufficient made for present requirements.—Angle Bob in Adit Level: One of the travelling wheels shifting has been put in its original place, and newly and firmly keyed.

RICHMOND CONSOLIDATED.—July 19: Telegram received this morning from the mine at Eureka, Nevada:—"Furnaces just started. New machinery running smoothly."

— R. Rickard, June 28: Lizette tunnel drift south has been extended 46 ft. in good ground. The 200 south from No. 16 chamber has been drifted 11 ft. in ledge matter. The 300 north drift has been extended 9 ft. in hard limestone. The 400 north from No. 11 chamber has been advanced 9 ft. without any change to mention. The 600 north from No. 14 shoot has been drifted 7 ft. in hard limestone. The 600 east from north fissure drift has been extended 13 ft. in favourable ground. The rise in back of 700 is much improved, there being now 6 ft. of good ore. The shaft is down 165 ft. below the 900, with bottom still in quartzite; very favourable ground for sinking.

INDIAN GLENROCK.—Extracts from the general manager's letters, dated June 23: Tunnel: Fair progress is being made in all the underground workings. —Reduction Works: Excavation is still going on, and the putting up of the columns is being proceeded with.—Glenrosa: We are daily expecting to cut reef in the new short drift. We have still a strong leader 15 in. to 18 in. thick in No. 2, giving a fair prospect. We have descended into old workings at Sellambully, and examined the lode. It is my decided belief that the reef here is the same as that in Glenrosa. If my surmise is correct, Glenrosa should turn out to be very valuable. I was perfectly astounded at the immense amount of work carried on by the ancients, and have no hesitation in saying that to induce such labour very considerable riches must have been obtainable.

SOUTH INDIAN GOLD.—Extract from general manager's letter, dated June 23: South Indian Tunnels: Underground work is proceeding steadily. In driving the new cross-cut between Nos. 2 and 3 we passed through some ground which I thought looked very likely to carry gold. I had some washed, and am glad to say that on the Korumber dish it gave a very fair show of gold, and I have no doubt that the whole will pay. The run of the ground in question is parallel to No. 1 reef, and will, I think, continue up the gulley below the tunnels; in that case there will be many thousands cubic yards, to turn over which might be cheaply treated in the ordinary sluice box.

CHILE GOLD.—The produce of gold at these mines for the month of May, with only 10 stamps running, amounted to 360 ozs.; and it is explained by the manager that this has been obtained wholly from the free gold contained in quartz, and which averages about one-third of the produce; the remaining two-thirds, contained in the sulphurets, being set aside for treatment when the machinery which is now being manufactured for the Chile Gold Mining Company (Limited) is delivered at the mines. The yield of gold for the month of June is estimated at 700 ozs. The operations for the past two months have been purposely limited in view of the transfer of the property to the Chile Gold Mining Company (Limited), and the gold obtained has been the produce of the quartz from the sinking of the shaft and driving of the levels in the mines. The amount of reserves is consequently increasing considerably. It is estimated that the gold contained in the sulphurets which have been set aside at the mill during the past two years for treatment by the new machinery and appliances which are now being prepared for the company will amount in value to from 50,000*l.* to 60,000*l.*; consequently on the completion of the company's new 60 stamp mill, in the course of a few months, the produce from this company's mines will doubtless be of a very satisfactory nature. In the interim it is intended to bring the 30 stamp mill into full operation, when it is expected that free gold amounting to from 1800 to 2000 ozs. per week will be obtained.

HOOVER HILL.—Extracts from letter dated July 4 from the company's resident and mining engineer. The following is our progress for the last week:—Mill: Is so far advanced to-day, that entire building, ore bins, steam-engine, and boiler have been completed and finished off. The carpenters are fixing mortars, having just completed mortar blocks, and the fitters will commence this week to lay shafting. When pans and settler are put in position, with table-frames for plates and blankets completed, and the bridge that connects mill with tram finished, the entire work can then be said to be done. This, I hope, will not take over three weeks from now to complete, although I fear it will take as much.—Mine: I am particularly pleased to say that we continue to break good ore in both drivings and stopes in Gallimore. Our continued investigations in Old Briols reveals the fact that a large quantity of high grade ore —but roughed—has been left standing by former workers. I am pushing down Provost Shaft with all speed. Nevertheless, the rock being so hard, it is slow work to enable me to get under Briol's and connect with Gallimore, when we shall get matters into more miner-like shape. I have had built, during the past week, an assay, retort, and smelting furnace, which will be of great service. We have had less heat of late and more rain. All work at the mine is suspended for this day, it being the national holiday.

LA PLATA MINING AND SMELTING COMPANY.—Smelting statement for week, from June 18 to June 25: Ore purchased, 1083 tons; ore smelted, 72-tons; silver produced. 19,766 ozs.; lead produced, 154 tons; silver-lead bars consigned to refiners, 156 tons; value of consignments, $32,163, equal to 6700*l.*

Cablegram from New York, received July 22: The nett profit for the month of June is $15,760 30c., equal to 3283*l.* 6s. 8d.

VIRNEBERG COPPER.—R. K. Roskilley, July 16: Hadley's Engine-Shaft: In the 160 metre level, driving south of cross-cut, the lode for the part carried is 4 ft. wide, producing good stones of copper pyrites. The forebreast has a most promising appearance, and, therefore, we believe that a change for the better will shortly take place in this end. The lode in the level driven west of level, south of cross-cut, has during the week improved, yielding saving work for copper; we think from the appearance of the ground here that we are in close proximity to the hanging wall; immediately this is reached we shall drive on its course, and from the very congenial character of the lode we fully expect it will further improve; we have put six men in this end to explore it with greater rapidity. The lode in the 140 metre level, driving north of new cross-cut, is looking better, yielding very fine stones of copper ore—a very kindly lode; the end is being extended north immediately under the stope in the back of the level, in which there is a good course of ore, and its development will undoubtedly open up a profitable portion of ore ground. Good progress is being made in the rise in the back of this level, and we are expecting daily to communicate with the end driven north of the stope north of cross-cut; when this is effected it will not only improve the ventilation, but will enable us to take away this piece of ore ground advantageously. The stope in the back of this level, south of shaft, is worth 5*l.* per fathom. The lode in the stope in the back of ditto, south of new cross-cut, is worth 9*l.* per fathom, and promising an improvement. In the stope in the back of ditto, north of rise, the lode is worth 10*l.* per fathom. The lode in the stope in the back of this level, north of cross-cut, is improved, and worth 15*l.* per fathom. The stope in the back of the 120 metre level is worth 5*l.* per fathom. We have not as yet cut through the lode in the 100, south of shaft, which at this point appears to be large; the forebreast is producing very fine stones of ore. The lode in the stope in the back of this level is worth 22*l.* per fathom. The dressing of copper ore is being proceeded with as usual, and towards another sampling we have 1074 centners dressed.

ARENDAL.—John Daw, John Daw, jun., July 13: Yesterday we went through these mines, and the following is our report:—Skytmyr Mine: In the 75, east of Benson's, the lode is 3 ft. wide, improving, worth 2½ tons. The 75 west is holed to the winze; this end is being driven by six men to communicate with Lamb's shaft as early as possible: the lode is 3 ft. wide, worth 1½ ton per fathom, The 60, east of Benson's, is improving, the lode being 3½ ft. wide, worth 3 tons. The same remark will apply to the 50. Our stopes througout this mine are looking well, yielding from 1 to 5 tons per fathom.—Boilstad Mine: The shaft is sunk about 8 fms. below the 40, the lode being fully 5 ft. wide, composed of quartz, mundic, capel and copper ore, worth for the latter 3 tons per per fathom. We never saw the lode looking more promising for making large courses of copper ore than it is now. At other points and stopes there is no alteration to report. We are expecting two vessels every day—the Samuel Holland to take 270 tons, and the Albert Baltzee to load 265 tons, making 535 tons. We shall send fully 400 tons per month, as promised, although one month may appear a little less, but this is owing to the chartering of the vessels. We cannot always depend on getting vessels to take the exact 400 tons per month, but at the end of the year you will find this quantity, and, if possible, a little more. Mr. York, one of our directors, is here, and, no doubt, will report to you on his return the state of the mines and machinery.

PESTARENA UNITED (Gold).—S. Gifford, July 15: Fortnightly Report: Val Toppa: At the No. 1 north on the west lode a hard band of quartz continues on the footwall, worth 4 tons of ore per fathom, at 6 dwts. per ton. On the new lode north on the same level the ore is much broken up, and the end will soon work out into the old stopes, but in the south end the lode has improved, being much more regular, with good hanging-wall; there is also greater width and better ore, the end being now worth fully 12 tons of 6 dwts. ore per fathom. The stope underneath on the flat lode shows the ore in broken overlapping bands, with a tendency to increased general width; the present yield is about 7 tons of 8 dwts. At No. 2 on the slide a flat course of easy ground carrying a little quartz has come in, and this may lead to change for the better. No. 3 on the same course continues without change, the rock being mostly chloritic schist. Driving north commenced at this level on the Great Quartz lode seems to develope a rising up of the shoot or pipe of ore gone down in the bottom to No. 4, there being now patches of auriferous quartz half way up the end. The winze under this at the No. 4 level to prove the same pipe goes down in sterile rock behind the ore. The cross-cut west at Nos. 1 and 2 levels show no change, the first being in fissile blue schist, and the other in hard quartzite. The stopes are yielding favourably, with the exception of the one at the No. 1 on the west lode, where the ore is fast dying off.

Pestarena: The lode in the 33 north, on No. 1, is small and of little value, although occasional strings of pyrites appear. The No. 5 end has been resumed to break stuff for filling the 80 stopes. No lode is seen at present. The lode in the 80 is small, and composed chiefly of soft schist. In the 90 cross-cut the ground is little harder, but fair progress is being made. The lode has improved in the 110 south, and is now worth 2½ tons of ore of 15 dwts. per fathom, with hopes of increase. Sinking the Incline shaft is rather impeded by the small breakages in the pump-rod, chains, pins, &c., but the ground is without change. At the 65, on No. 2, we are still without ore, but the rock passed through is of a more promising character. The same level north, on No. 5 lode, remains as for some time past. The end occasionally shows spots of ore, without leading to anything of value. In the south end the lode gets a little smaller, but is richer in pyrites, and yields at present 8 tons per fathom at 1 oz. At the mouth of cross-cut lure, where the lode is intersected, the ground is being taken down preparatory to sinking a winze to the 90 to prove the lode and ventilate the works as quickly after the 90 cross-cut gets in as possible. The rise from the 65 to reach the 33 winze shows a daily improving lode, quartz and pyrites now extending the whole length (8 metres), and worth 7 tons at 8 dwts. per fathom. A drive has been started lately on a western branch making south from a stope in back, which promises to give ore; it now yields 8 tons of 17 dwts. per fathom. The lode in the winze at the 33, on No. 5 lode, has become a little more contracted in the south end but it contains more pyrites, being now worth for treatable ores 6 tons of 12 dwts. per fathom.

PIERREFITTE.—July 16: The manager reports as follows:—The cross-cut north in the No. 3 level presents indications that it is getting near the lode; good stones of lead ore are being broken from the immediate end. The prospects at this point are of great importance, as if the lode proves so productive as in the level above, which we have every reason to believe that it will, another valuable discovery will be added to the property. The ground in No. 2 level is somewhat harder; there is no material change in other respects. The level is to a great extent being carried by the side of the lode in order to effect a communication between this and the No. 1 level as quickly as possible. No. 2 stope over No. 1 level is so filled with ore that we shall have to suspend its working at present. No. 4 stope below No. 1 level yields 6 tons of lead ore and 4 of blende per fathom. No. 6 stope over No. 1 level 4 tons of rich lead ore per fathom and 1 ton of blende. During the past week 80 tons of ores have been broken from the stopes, &c. South mine: Very fair average work is being broken from the stopes throughout the workings. This week 13 tons of dressed ore has been put to pile.

CANADIAN COPPER AND SULPHUR.—Francis Bennetts, July 9: I am glad to say we have a good vein of from 9 to 10 ft. wide in the level above the 10, east of No. 7 shaft, Hartford Mine. We have also drained Hartford No. 1 shaft to the 10, and have found very favourable indications of a large quantity of ores to be obtained from this level alone. The 10 is driven only some 6 or 7 ft. east of No. 1 shaft. The vein in the drift is showing a width of 6 to 7 ft., there being still more vein apparently in the hanging wall.

LAST CHANCE.—The directors have received letters from their agent at Salt Lake, under date June 24 and 30, and from which the following are extracts.—June 24: The developments on the Hooper Mine are looking better now than at any time before since starting work, and I am now fully satisfied that the company has one of the most valuable, if not the best, mine in the district. Our present developments show that the lode, Hooper lode, is continuous, and the ore increases in richness as depth is attained. The face of tunnel No. 2, which is now extended on the vein a distance of 382 ft. from intersection of the vein is almost in its entire width in first-class smelting ore, assaying 90 41-100 ozs. silver, $4 22-100 gold, and 57 per cent. lead per ton. The workings of tunnel No. 1 expose a fine looking vein matter with a string of good galena ore through it assaying 75 83-100 silver, $2·22 gold, and 47 per cent. lead per ton.—June 30: I visited the mine on the 26th inst. They were then adjusting the air-pipe in level No. 2. The ore spoken of in my letter of the 24th inst. still continued in the face of the drift, being about the same class and character as last reported, and looking very well indeed, with every indication of being continuous and of large extent. The water in the winze has somewhat decreased, and Captain Samson expect to work at this point within 10 or 12 days. Tunnel No. 1 is also looking very well, the streak of high-grade galena ore being still in the face of the drift; the vein is in easy running soft material, requiring timber to support the workings. Everything in and about the mine is going on in a highly satisfactory manner. The miners in level No. 2 are very much elated over the very encouraging prospects of striking a rich bonanza soon.

— Telegram: "We have during the past week run 26 ft. in tunnel No. 1, and 12 ft. in tunnel No. 2, low grade ore, with rich grade ore mixed through it. Struck very rich ore assaying $110. We have now on the dump 10 ton of first-class ore and 40 tons of fair grade ore. Will ship as directed next week. Have started Opulent Mine."

Mining Correspondence.

BRITISH MINES.

ASSHETON.—Joseph Garland, July 20: The 60, east of boundary shaft, was extended last month 3 fms. 1 ft. 9 in.; the portion of the lode being carried is 3 ft. wide, composed of hard quartz and a sprinkling of lead ore. It is our intention, after driving a fathom or two more, to cross-cut the lode to determine its full size and character. The driving has been reset to four men, at 6*l.* 10s. per fathom.

BEDFORD UNITED.—R. Goldsworthy, July 20: There is no alteration in the 127 or the 115 east to call for any special remark since last reported.—Bridge Lode: Mr. Callan's engine-shaft is in full course of sinking, and the lode is about 4 ft. 6 in. wide, and worth, for the length of the shaft, 30*l.* per fathom. The lode in the 20 is 4 ft. wide, composed of quartz, gossan, and gray and black ore, worth, for the latter, 9*l.* per fathom. In the western end at the same level, the lode is 7 ft. wide, worth 9*l.* per fathom. A very fine strong looking lode, and judging from its promising appearance, depth only is required to make this property a success.

BLAEN CAELAN UNITED.—J. Pell, July 20: Since last report our progress has been at times impeded by a short supply of water for dressing, but am sending down a parcel of ore to the station this week. The tributers have finished their bargain, and are clearing out the stuff from the 30 fm. level. I hope to re-set on better terms for another four months. Have forwarded sample of copper taken from the forebreast of the deep adit level west; thia level has upwards of 40 fms. backs, and if present price will admit shall put a bargain on this copper lode.

BLUE HILLS.—S. Bennetts, R. Harris, July 16: There is no change worthy of notice in the 80 east, the lode being 1 ft. wide, of low quality tinstuff. The 42 east is also producing some low quality tinstuff, and the 30 east end is worth 14*l.* per fathom.

BODIDRIS.—H. Hotchkiss, July 20: Maes-y-Pwll Lode: The 60 east is steadily going forward in a promising lode, which contains a nice mixture of lead ore and blende near the hanging side. The stope under this level is producing ore as for some time past. I shall commence delivering the parcel of lead ore to the station on Monday next. No other change to report.

BWLCH UNITED.—Wm. Northey, July 20: In the 50 east the stratum is of a congenial character for producing lead ore, and the lode is getting more defined and carrying a good wall. In the 30 cross-cut there is nothing new to comment on. I have put two of the men to stope in the back of the 12. The 12 under adit, driving east, is worth 18 cwts. of lead ore per fathom. The men for the following month will be employed in driving and stoping as directed. The stope in the bottom of the 12 rathom level west will yield 20 cwts. of lead ore per fathom.—The Marvin's Loda, 15 fathoms under Adit: The lode maintains its usual size andvalue, worth 21 cwts. of rich lead ore per fathom. Surface Work: The masons will complete the wheel pit to-day to enable the carpenters to commence fixing the 20 ft. wheel, &c. Although we have several yards of walls to build to prevent the pit being filled with skimpings, &c., I can assure you no time will be lost in erecting the new dressing machinery. I thoroughly overhauled the crusher, and found a new set of cog-wheels were required, and a new frame to carry the same, and I am daily expecting the same delivered on the mine. We have also overhauled the rods and bobs, and changed the brasses of the large plunger to the Ellen's pumping-wheel, and all are working well,

CALLINGTON CONSOLS.—Thos. Gregory: The shaft men are now engaged in cutting cistern plat at the 45 fm. level, preparatory to fixing standing lift, after which the sinking will be forced on for a 60 fm. level. In the 45 fm. level east, driving by the side of the lode, the ground is favourable for progress and the production of ore. In the 45 fm. level west we are cross-cutting north on the lode, which, I am pleased to say, is improving as we advance, and is now producing saving work for copper ore. We are going on favourable with the timbering of Tonkin's shaft and other necessary work.

CARNARVON COPPER.—J. Roberts, W. Darby, July 19: During the week the lode in the 90 end has become a little poorer, worth at present 24*l.* per fathom. In the sump at the 80, the lode has considerably improved, and is at present worth 24*l.* per fathom. We communicated with the 90 last night, and in the course of a few days we shall have opened up sufficient room, put down tramroad, &c. Then we shall commence stoping at once, and also commence working on the ore which we cut through in driving the 90 end.

COED-Y-FEDW AND PANT-Y-BUARTH.—R. Prince, July 21: Pant-y-Buarth: The lode in the 107 fathom level is gradually opening out, being now about 5 inches in width, and composed of spar and blende, with a little mixture of lead. The fresh bed of limestone which I mentioned in my last report as coming in rises but very slowly. I am, however, more convinced than ever that when we have fairly entered it we shall meet with good results. Our progress hitherto, owing to the hard and compact character of the rock through which we have been driving, has necessarily been slow, but there is a slight improvement in this respect, which will, I believe, become more marked each week.

COURT GRANGE.—J. Pell, July 20: The 30 is making good progress with nine men. The lode has passed for upwards of 4 fms. through a cavity lined with spar, and carrying two branches of lead and blende. It is now in a nice killas, and is producing 1 ton of lead to the fathom. The stope is yielding very good crushing stuff, with a quantity of carbonate mixed with it; it is now 20 fathoms long, worth 12 to 15 cwts. per fathom. The swo tribute bargains to 12 men, in back of 30, east of footway and west of footway in the back of the 14, are yielding about 10 cwts. per fathom. The tribute pitch in the back of the 45 will produce the same quantity; set to six men. There is another pitch set on tribute to four men in the back and sole of old shallow adit level, west of engine-shaft, at 8*l.* 8s. per ton. All plant and machinery is in excellent order, and doing capital work, and we have not this year wanted for water. Our supply is no longer intermittent, and with a continued course of ore in the 30 the returns can be made in increased quantity.

CROOK BURN.—Jacob Craig, July 15: The alterations to engine are now completed, and it is now drawing and winding satisfactorily. We have got most of the work drawn out of the north and south cross-cuts. The water having been in the mine so long has done a little damage to the rise, which we will be able to repair in a few days, after which we will cross-cut through to the vein. There is no change in the north cross-cut.

CWMYSTWITH.—Joseph B. Rouse, July 19: New Lode: In the 15 fm. level east of Edward's winze the lode looks more promising, being large and open, letting out a good feed of water, and yielding a little lead and blende. In squaring up the stope in Gill's lower level with the present end, we find that a good lode is making away eastward; therefore we have put the men to drive a few fathoms east to prove it. The lode in the end is worth 1½ ton of lead ore per fathom.—Kingside Lode: In the stope under the 15 fm. level east of Kingside shaft the lode is 5 ft. wide, worth 1½ ton of lead ore per fathom. I am pleased to say that our supply of water is fair, and our ponds keep about half full.

DENBIGHSHIRE CONSOLIDATED.—A. Francis, R. Prince, July 21: The driving of the lode out of the north cross-cut is still in the course of ore, and we are opening out more ground, which ought to pay well for stoping, even at the present low price of ore. The end is at present worth nearly 1 ton of lead to the fathom. The stope to the back is worth a little more, say 1½ ton of lead to the fathom, particularly the western end. The ore is improving in the bottom. No other change, but busy dressing good piles of lead.

D'ERESBY MOUNTAIN.—J. Roberts, W. Sandoe, July 20: The No. 6 maintains its value, 2½ tons to the fathom. We have let a stope behind the end to four men, which is not altogether into the main part of the bunch in the end, but as the end advances we shall continue the stope to follow, and if it continues as now we shall be able to raise a good quantity of lead from here. In the stopes we have spent a great deal of time this month in desuing the lode or opening on it to make advantage for working it, and we shall be able just now to break away the lode to the best possible advantage.

DERWENT.—John Morpeth, July 14: The 95 on middle vein east of Jeffries shaft is without change; it is still being worked 9 ft. wide, for which width it yields 1 ton 17 cwts. ore per fathom. The flats in this level on south side of vein yield 25 cwts. ore per fathom. No. 1 stope in the back produces 10 cwts., No. 2 15 cwts., and No. 3 10 cwts. We have stopped the stope in the back of the 93 west of this shaft, the ground was tight and vein poorish.—Westgarth's Shaft, Middle Vein: The two stopes east of this shaft, one over and the other under the 33 fm. level, are each worth 10 cwts. ore per fathom.—North Vein: The two 93 fm. levels on this lode, one east and the other west of rise, opposite shaft, are each worth 12 cwts. ore per fathom; vein 4 ft. wide in both places. The stope in the back of the west level west from rise yields 1 ton ore per fathom; vein quite 4 ft. wide. We have started a stope just a few days ago in the back of the 93 east from rise where the vein is worth 16 cwts. ore per fathom, and is 4 ft. wide. The working over the 79 at the junction of Middle Burnshieldshaugh vein, west of shaft, still yields 16 cwts. ore per fathom. We purpose starting the furnace on Monday morning next to smelt the month's ores. The machinery is all going without any interruption, and the large ponds are healthy as far as reserves of water are concerned.—P.S.: I omitted in the above to say that the cross-cut at the 79, opposite Westgarth's, is without change, and the rise in the back is as before still yielding 10 cwts. ore per fathom, vein 3 ft. wide.

DEVON FRIENDSHIP.—Charles Thomas and Son, July 20: There is no change of importance underground. There is a very fine-looking lode in the adit end, still yielding 6 tons of arsenical mundic per fathom. We have completed the bob-pit, and fixed balance-bob at Bennett's shaft. We hope to commence connecting flat-rods from wheel-pit to Bennett's, and shall also begin to fix pitwork in the shaft during the coming week. The ground for a new tramroad from Bennett's to the dressing-floors has been levelled, and we are making preparations for laying the rails as soon as possible. We sold over 6 tons of tin last week, and have sent away samples of two lots arsenic now ready for sale, amounting in all to about 80 tons.

DEVON GREAT CONSOLS.—I. Richards, July 20: Wheal Josiah: In the 144, east of the count-house shaft, the lode is 4 ft. wide, composed of capel, quartz, and a little of both copper and mundic ores.—Wheal Emma: Inclined Shaft: In the 190 east, east of Oliver's cross-cut, on the north part of the lode, the lode is 5 ft. wide, composed of capel, quartz, peach, and some good quality copper and mundic ores. In the 137 east, east of Friend's cross-cut, the lode is 5 ft. wide, composed of capel, quartz, peach, fluor, and saving work of copper and mundic ores.—New Shaft and New South Lode: In the 205 west, on the north part of the lode, the lode is 4 ft. wide, of a very promising character, and producing some good quality copper ore and 2 tons of mundic per fathom. In the 115 east the lode is 4 ft. wide, composed of capel, quartz, and small quantities of copper and mundic ores. In the 100 east the lode is 1½ ft. wide, and producing a little copper and mundic ores. In the 90 east the lode is 3 ft. wide, composed of capel, quartz, peach, and a little of both copper and mundic ores.—Railway Shaft: In the cross-cut (Bray's) north at the 205 the ground is tolerably favourable for progress, and congenial for mineral. In the 190 west, on the north part of the lode, the lode is 4 ft. wide, of a very promising character, and producing some good stones of copper ore and 3 tons of mundic per fathom. In the 175 west, on the south part of the lode, the lode is 3 ft. wide, of a very promising character, and producing some saving work of copper and mundic ores. In the 160 west, on the south part of the lode, the lode is 1½ ft. wide, and producing small quantities of copper and mundic ores. In Rich's winze in the bottom of the 160 west, on the south part of the lode, the lode is 5 ft. wide, and worth 4 tons of copper ore and 3 tons of mundic per fathom.—Watson's: In the engine-shaft, now about 10 fms. below the 75, the ground is tolerably favourable for progress, and continues to be congenial for the production of mineral.

DEVON GREAT UNITED.—Isaac Richards, July 20: The laying of the skip-

road in Willesford's shaft is in a forward state of completion, and as soon as finished the men will proceed with all speed to ease and divide the shaft from the 20 downward. In the 60, west of Willesford's shaft, on the Capel Tor lode; the lode is 3 ft. wide, and continues to produce some saving work of copper and mundic ores. In the 50, west of Watson's shaft, on the Capel Tor lode, the driving is being carried by the side of the lode for more speedy progress. In the cross-cut at the 20, west of Willesford's shaft, the ground is favourable for progress and congenial for mineral.

DRAKE WALLS.—Moses Bawden, July 21: I am pleased to be still able to report that the water is going down in a very satisfactory manner, and we purpose at once to re-start the engine to assist the draining, so that our men may make the communication from the deep adit to the old mine without the slightest danger of a rush of water from that direction. All the necessary repairs to shafts and levels are being carried out as the water is going down.

DUCHY.—Ph. Argall, July 16: The lode in the engine shaft, which is principally spathose iron, is becoming very much mixed with lead, which frequently occurs in fine grains disseminated through the spathose ore, and occasionally in bunches and veins. The 60 fm. level west of engine shaft is now in a vein of soft decomposed spathose iron, carrying lead and producing saving work. It is evident the spathose iron is passing into lead in depth, and I have no doubt but we shall find a valuable lead lode at the 80 fm. level. The winze sinking below the 60 on No. 2 lead lode is producing good stones of lead and spathose ore, also the end driving north on this lode. I have put the men to drive a cross-cut in the 60 west, to connect the north and south ends to ventilate the workings. The cross-cut south at the 50 fm. level west is now in the blende ground, and is looking very promising. The various blende and copper stopes are continuing as last reported. We have cut a very promising lead lode in the cross-cut south of Swansea shaft at the 20 fm. level.

EAST BLUE HILLS.—S. Bennetts, July 21: In the adit east end the lode is now 3 ft. wide and looking highly promising. Although there is no leader of rich tinstuff at present, yet the lode is all tinny throughout, which is a great feature in connection with this lode. The 25 is being cleared so fast as possible; it is, however, a very small affair, and in addition to clearing and securing, much blasting is necessary to make way for a wheelbarrow, which causes some little delay in the clearing.

EAST CHILLATON (Bowden Down).—Wm. Doidge: No. 1 shaft: We are driving cross-cut by two men at 3*l*. 10s. per fathom. No. 2 shaft is sunk 6 fms. 5 ft. 6 in. This shaft is set to four men at 3*l*. 10s. per fathom. Here we have a strong lode, composed of capel, spar, and manganese. No. 3. shaft: We have been through the top lode, which is 2 ft. wide, and hope to cut the bottom lode very shortly. No. 4 shaft is sunk 4 fms. 3 ft. This shaft is set to two men at 2*l*. 6s. per fathom.

EAST ROMAN GRAVELS.—Arthur Waters, July 21: The lode in the 109, or bottom level, south of Boundary shaft, continues to open out favourably. The vein yesterday, as far as cut into, was 4 ft. wide, worth quite 2 tons of lead ore per fathom. We are not sure that this part of the lode has been seen in the 97, hence it is proposed to cross-cut west in that level 2 to 3 fms. by way of trial. The lode in the 97 south is 4 to 5 ft. wide, composed principally of calcspar and solid blende, but without lead ore to value. The ground being wet we expect an early improvement in this end. The winze below the 86 will be down to level of the 97 by the time calculated on. The 86 north of junction, on east part of the lode, is worth ¾ ton per fathom. No change in the stopes since last reported on. We are getting on with the loading of the boiler lately purchased, and hope to have it on the mine next week.

EAST UNY.—J. K. Harvey, July 21: At the 82 west we shall continue driving on the south part of the lode for another 2 fms., so as to reach the junction of the two leaders of copper before taking down the north part. At the 70 west we have taken down the lode in the rise, which produces 1½ ton of copper ore to the fathom. We have cut across No. 2 lode in the cross-cut 9 ft., but we have not yet reached the south wall in the eastern side; it is all stamping work for tin. There is no material change to report elsewhere.

EAST VAN.—W. H. Williams, July 21: I have nothing fresh to report from here this week in the way of discovery; both cross cuts are almost precisely the same in appearance as when I sent you my last report.

EAST WHEAL CREBOR.—George Rowe, July 21: The lode in the 70, west of the engine-shaft, improves in character, producing fine stones of ore. The north lode in the 70, west of cross-course, is also improving both in size and character, with very strong arsenical mundic and good stones of ore. The lode in the stopes below the 60 fm. level is worth 10*l*. per fathom. All other points are without change.

EAST WHEAL ROSE.—Capt. Thomas Doidge, July 16: Since my last report we have started the little engine, and have now resumed clearing Penroe's shaft. The masons are making good progress with the engine-house; it is now 12 ft. 6 in. high. This, as you are aware, is one solid mass of masonry, and will be the top of the loading. The quarry is producing splendid stone, and progressing satisfactorily.—North Wheal Rose: The masons are building a small house to put the blue lias lime in for the building of engine-house, after which I hope this engine-house will rapidly progress.—Adit Level: We have cleared about 80 fms. in the past fortnight, and cleared and secured and collared two more adit shafts.

GAWTON COPPER.—George Rowe, George Rowe, jun., July 16: The lode in the 117 east is 5 ft. wide, producing copper and mundic to the value of 10*l*. per fathom. The lode in the stope in the back of this level (117) is worth 15*l*. per fathom. No. 2 stope in the back of the same level (117) is worth 8*l*. per fm. The lode in the 105 east is yielding ore and mundic to the value of 11*l*. per fathom. The lode in the stope in the bottom of the 105, east of cross-cut, is worth 10*l*. per fathom. The ground in the 95 fathom level cross-cut, going towards the north part of the lode, is stiff and slow of progress, spotted with mundic and ore. The south part of the lode in the 70, east of cross-cut, is yielding 10 tons of mundic per fathom. The lode in the rise in the back of the 70 fm. level is yielding 7 tons of mundic per fathom. The masons are progressing with the building of the arsenic stack very satisfactorily.

GLASGOW CARADON CONSOLS.—W. Taylor, W. J. Taylor, July 18: We are pushing on the 114 cross-cut south as fast as possible, and the ground continues favourable. We set on Saturday 5 fms. stent; this will very nearly if not reach the new south lode, which has a very good appearance in the level above —the 102. There are other branches laying between, which we are expecting to cut daily. We are anxiously looking forward to this as a very important point, and we hope the next two or three months' driving will show some important discovery. The 114, east on shaft branch, is producing good stones of ore, which we hope will improve as further opened on. East from winze in the bottom of the 90 is worth 6*l*. per fathom. No change of importance in the tribute pitches. The stopes on the whole are valued at 10*l*. per fathom. The result of sale of ore on Thursday will be sent on as usual.

GODDARD'S LEAD.—R. H. Vivian, July 21: The lode in the shaft is increasing in width and productiveness for lead and blende, the matrix being chiefly carbonate of lime. The lode here is nearly as good as in the engine-shaft, and I believe when the same depth is attained, which is about 3 ft. more, it will be equally good. The blende will greatly help to meet the cost of the mine, independent of the lead.

GOODEVERE.—R. Knott, July 21: The sinking of the engine-shaft, and the driving of the cross-cuts from each adit level, progress favourably. The surface work is being urged forward with all possible dispatch. Counting-house is covered in, and the interior work is being got on with as fast as possible, and we have now six men engaged in opening up the lobby for unwatering the stamps and wheel-pit.

GORSEDD AND MERLLYN.—W. Edwards, July 21: The lode in the end of the 70 east level is getting to look more promising, and large quantities of lead and spar are coming from this portion. The 50 west level south driving on top of the rise, is in very good ground, producing lead worth 14 cwts. to the fathom, and there are some small feeders coming in from the heading side of the lode to-day, and other encouraging features that lead me to think we are going into a good body of ore. The 90 west level keeps the same as last reported. The shale beds have gone above the roof of the level, and there are two ribs of lead and spar, with about 1 ft. of limestone between them. I expect the stone will work out, and that the two ribs will form a junction. The present value of the end is 1 ton of lead to the fathom. No. 1 pitch in roof of 70 east is worth 16 cwts. of lead to the fathom, No. 2, 18 cwts., and No. 3, 16 cwts. to the fathom.

GREAT HOLWAY.—W. T. Harris, July 21: Roskell's Shaft: In the 110 east very satisfactory progress is being made. The lode maintains its usual width and congenial character, and a good stream of water flows from the forebreast, as before reported. One great feature in driving this level is the intersection of Maes Whitford lode, and no time will be lost in accomplishing this important object. The west end is identical in composition, and containing the same favourable indications; and we expect shortly to meet the first run of ore coming in this direction from Victoria shaft. The lode in the 80 west is now 2½ ft. wide, containing a slight mixture of lead and blende, and promising for an improvement.—Garden Shaft: In the driving east from No. 2 in bottom of 55, the lode is producing ¾ ton lead and 1 ton blende per fathom, and improving.—Office Shaft: Stope in bottom of 60 west has also improved, the lode producing 15 cwts. lead ore and 1 ton blende per fathom, with a most encouraging appearance.—Brammock Shaft: The three pitches continue to yield lead and blende in quantities quite equal to last report, with every prospect of remaining the same for some time to come.—Level Engine: No. 1 pitch is producing 30 cwts. lead ore per fathom; No. 3 is producing 4 tons lead per fathom; and No. 5 is yielding 5 tons per fathom—a fine-looking lode, with every prospect of continuing. Surface work making usual progress. Dressing is being urged forward with all possible dispatch. Yesterday we sold 25 tons lead ore, at 11*l*. 2s. 6d. per ton; and expect to sell another 25 tons, together with 40 tons of blende, by the end of the month.

GREAT POLGOOTH UNITED.—Wm. Richards, July 20: Adit Level, Old Mine Lode: This level is now cleared and well secured with timber to within about 5 fms. of the great cross-course; we hope to complete this work and reach the end in about a week; there is a cross-cut driven south from this level which has intersected the flat lode; this lode will produce good tinstone in quantity for the stamps, and in whole ground for the length of the sett east of the cross-course. At Craig's shaft the men are making fair progress in clearing and securing this shaft, and we expect to reach the deep adit level in about 4 fms., and let down the water from Wheeler's shaft. No. 2 lode is of much the same character as last reported, producing stones of tin—a most promising lode. In the new lode north of the great elvan course we have commenced sinking a downright shaft further west to take the lode at a deeper point from surface. We are pushing on with the surface work with all possible dispatch.

GREAT RETALLACK.—J. Harris, July 16: The shaft is sunk to within 2 ft. of 11 fathoms below the 33, and I have set the men to drive the 64 east from the shaft at 10*l*. per fthom for 6 ft. extent. The lode is showing good stones of blende, but the rock is of such an unusual character, that I have set the men a short stent, but I hope the ground will soon change for the better.

GREAT WEST CHIVERTON.—John Curtis, July 13: The engine-shaft is sunk 14½ ft. below the adit level; lode 18 in. wide, with mundic, peach, spar, &c.; a kindly looking lode. It is just now in the blue clay slate, and the water is principally coming from between the blue and red killas; by sinking the shaft a few fathoms deeper a caunter lode will form a junction with the engine lode, and at this point I fully expect a much better lode will be met with. Water fast increasing upon us.

GREAT WEST CHIVERTON.—J. Curtis, July 19: The lode in the engine-shaft is a little larger than it was last week, and letting out more water as depth is attained. From present appearances we shall not be able to go much deeper by manual labour. A portable engine, of say 8-horse power, would be sufficient for us to go to the 10 level and see the lode reported on, where it is said to be good lead in it where seen by the old miners in the valley.

GREAT WHEAL POLGOOTH.—John Rodda, July 21: We have made good progress in clearing the deep adit level, having cleared over 400 fms. We are also getting on very satisfactorily with the main leat, and other work is progressing as fast as can reasonably be expected. We hope that the wheel will arrive in the course of a week or so, when we shall commence fixing our pumping gear, &c.

GREEN HURTH.—Wm. Vipond, July 15: In the end of the opening level, south from Swan shaft, a small west branch has come into the vein, making a little ore in the top part of the level. It is not of much value yet, but it is an improvement, and the appearance of the vein is altogether better than it has been lately. If these branches should begin to come on again, as they did in the vein further back, we should have this an ore-bearing end again, and no mistake. The roof of the standage level north continues to yield 6 tons of ore per fathom; we shall commence rising from this to the 30 on Monday. Stope No. 2, south from rise above the 30 fm. level, is yielding 1½ ton of ore per fm. Stope No. 2 above the 30, going to Vipond's sump, is yielding 5 tons of ore per fathom. These stopes are not regular in their yield—sometimes a large mass of ore for a fathom or two in length, and then not quite so good for a few fathoms, but still yielding well when yielding least. Stope No. 3, going on to Vipond's sump, is yielding 2 tons of ore per fathom. The stope in the sole of the 30 going north is yielding 16 cwts. of ore per fathom; we shall have to begin driving this next week, as we are getting close to the end going that way. We shall probably have a few fathoms of poor ground, when we shall come under the rich ore that was first cut in the adit level south; I fully expect when we get under this that we shall meet with a rich deposit in the Lower Limestone. We are making preparations to commence a higher stope to go on to Robinson's sump on Monday; the one we have been working has turned worthless at the random we are at. The cross-cut, south from adit level, is going on about as usual. Outside work progressing satisfactorily.

GWYDYR AMALGAMATED.—John Roberts, W. Sandoe, July 20: Aberllyn: There is no change whatever to speak of either in the sump or end. The sump is worth about 3 tons of bleude to the fathom, and the end is worth from 2 to 3 tons of blende to the fathom. The water in the lake is nearly all run out.—Clementina: The lode in the sump is improving, and there are east and west branches coming into the south end of the shaft containing also lead, so that we have to keep all the stuff from the shaft for the dressing-floors. The south is looking better also. In the lode there is a very large vugh and a branch of lead on one side it of about 2 in. wide—very rich. The north appears to have a little improvement. There are good spots of blende coming into the lode, and the ground is getting more congenial for producing lead.

HINGSTON DOWN.—Thomas Richards, July 20: No. 1 lode in the deep adit level east of the south cross-cut contains capel, quartz, mundic, &c., and occasional good stones of copper ore, and is altogether of a very promising character. In the 12 east of the engine-shaft the lode is without any important change, containing capel, quartz, mundic, &c., with a little grey and black copper ore. The skip road will be completed and the sinking of the engine-shaft commenced below the 12, cutting plat, &c., in the early part of next week.

KIRK MICHAEL.—R. Rowe, July 20: I am pleased to say that we have a large and exceedingly promising lode in the 20, driving south; it is still about 4 ft. wide, with lead mixed throughout, but not yet rich. It may be so from appearances any day. The shaft is down a little over 3 fms. below the 20. We are preparing a fresh sinking lift to go below from this point. In the 20 north we have begun a stope worth 10 cwts. of lead to the fathom, and in the 20 south the stope is worth 15 cwts. to the fathom. We are getting the lead ready as fast as possible for sampling.

KIT HILL.—Isaac Richards, July 20: The lode at the trial sink at the quarry maintains its size, 4 ft. wide, and continues very promising, and produces some good tin ore. At the mouth of the deep adit, or tunnel level, we have commenced an arch of masonry for securing the ground. Arching about 16 ft. long has been completed, and in the course of a day or two a further length of 12 ft. of ground will be ready for the masons. The repairs to buildings, &c., are proceeding very satisfactorily.

LADY BERTHA UNITED.—T. Nevill, July 21: The stopes are looking much the same as when reported on, yielding an abundance of arsenical mundic and copper ore. We are making rapid progress in the clearing of the bottom levels, and hope to be able to gain full details next week. The mine throughout is looking everything that can be desired. All our surface operations are being on as fast as possible.

LADYWELL.—Arthur Waters, July 21: The adit forebreast south of new shaft is into dry ground again, and I requested Capt. Bennett to-day to put the men to cross-cut west, to see if more lode be standing in that direction. This trial will be made about 10 ft. behind the end, and where the water is coming out of the west side.

LLANDEGLA.—H. Hotchkiss, July 20: The 36 yards level west of Whim shaft is progressing satisfactorily in a very strong lode containing carbonate of lime, with spots of lead ore and blende to be seen in parts of the lode, which makes it look very promising. No other change to report.

MELLANEAR.—John Gilbert, July 20: The 30 cross-cut, driving south of Gundry's shaft, is now 17 fms. south of the main lode, and we are still making good progress in driving, and the ground is strongly mineralised. The lode in the 60, driving west of shaft, on the main lode, is 2½ ft. wide, composed of lead, blende, and good stones of copper ore, and looking very promising. We have met with some small branches of mundic and copper in the 70 cross-cut, driving north of the main lode, which we think are feeders to the north lode that we expect soon to intersect. In the 80, driving west of Gundry's shaft, on the north lode, the lode is 3 ft. wide, and yielding 1 ton of copper ore per fm., and letting out a little more water. The lode in the 90, driving west of Gundry's shaft, on the south part of the lode, is 3½ ft. wide, yielding 2 tons of copper ore per fathom, and looking kindly for an improvement. The lode in the 90, driving west of shaft, on the north part of the lode, is 3 ft. wide, and yielding some saving work for copper ore, tin, and blende. In the 110, driving west of Gundry's shaft, on the south part of the lode, the lode is 3½ ft. wide, and yielding 2½ tons of ore per fm., and the ground much easier for driving. The lode in 110, driving east of shaft, on the main lode, is 4 ft. wide, yielding 2 tons of ore per fathom, and letting out a good deal of water. Driving west from the old engine-shaft, in the 110, the lode is 3 ft. wide, yielding stones of lead, blende, and copper ore. In the 110, driving east from the old engine-shaft, the lode is 4 ft. wide, and yielding some saving work for tin. Gundry's shaft, sinking below the 110, is still in the elvan course, and is very hard and spare for sinking. Our sampling yesterday was (computed) 516 tons of copper ore.

MORFA DU.—T. Mitchell, July 21: The 48 maintains the late improvement, and we have put the men to strip down the lode to ascertain its width at this point. The lode here looks very encouraging. The lode in the winze sinking below the 48 is yielding 3½ tons of ore per fathom. We have not holed it to the rise from the 60 as yet, but purpose boring a long hole through so as to let down the water. The rise in back of the 60 is of the same value as the winze over this place—worth 3½ tons to the fathom. The stope and pitches are looking much the same as when reported last week.

MOUNT CARBIS.—W. Tregay, George Johns, July 21: We are getting on well with fixing the engine. At the engine-shaft we are cutting ground for fixing cistern and plunger lift at the 27. We hope very shortly to be working on the tin ground opened here. The lode in the deep adit is opening well, and producing good stones of tin ground.

MOUNTS BAY CONSOLS.—Captains W. Argall and John James, July 18: Sidney Core: Since our report on the 4th inst. we have cut a tin lode from Brown's shaft by a short cross-cut north: it is from 1½ to 2 ft. wide, a very tinny lode for the depth, 3 fms., and is not out of the gossan yet. We have set 10 fms. to drive east and west of shaft, at 10s. per fm.; and, so far as seen, the value of the tin will more than pay the cost of drivage. In extending on this lode we are hoping to intersect the great Wheal Vor lode, about ½ mile west of of engine-shaft, on the sea coast. We find an old adit filled with sea sand, and to-day we have put two men to clear it. By doing this, and continuing the drive, if not far driven, we shall be proving some of our lodes west of the large elvan seen on the beach. Another point is, we shall have 15 fms. of backs. The masons have nearly finished the walls of the smiths' shop. We are making a drain to the engine-house, and making good progress in getting out foundation for the engine-house. Also getting stone for building the same, and bringing it on the ground, and we hope soon to have the engine so as to commence this work. The boiler from St. Ives we have arranged to have here this week.—Pembro: The men have completed repairs of adit to engine-shaft, on the No. 1 lode, and are cleared to this time 40 fms. further west, where we have met with a shaft which we shall spill through to go further west. We have sunk on the new, or Innes lode, about 4 fms.; the lode is about 5 ft. wide, containing spar, mundic, and occasional spots of silver-lead—a strong masterly lode. The ground and lode are getting harder, and when we get into settled blue ground we have no fear of the results. We purpose shortly to open on some of the other lodes in this sett. The smiths' shop will soon be complete; the carpenter is putting on the roof. The foundation for the engine-house is progressing well, and we have raised about 150 tons of building stone. We are pushing everything with care and economy, and as fast as possible.

MYNYDD-GORDDU.—Thomas Kemp, July 20: The north part of the lode carried by the 46 end west of Burnett's engine-shaft is without change since last reported; principally composed of cabe and crystallised spar; rather tight for progress. The north part of the lode carried in sinking the winze below the 34 is worth for the part carried 15*l*. per fathom; the lode still continues very tight and hard, which renders progress slow. The stope in the bottom of the 34 on the caunter lode is worth 12*l*. per fathom. The lode in the rise over the 34 on caunter lode is worth 10*l*. per fathom. No. 1 stope over the 34 on the north part of the lode is worth 10*l*. per fathom. No. 2 stope over 34 on main part of lode is worth 12*l*. per fathom. The lode in the bottom of the 12 is worth 10*l*. per fathom. The north part of the lode opened on by the 12 end west of shaft is principally composed of killas, carrying small strings of spar at present easy for progress; I would suggest that this level be extended some 2 or 3 fathoms further, and, should no improvement take place for the better, a cross-cut should then be driven north, as it may be possible that the main part of the lode is standing in that direction. During the past two or three dressing operations have been suspended in order to fire new shells on the crusher rolls; however, I am pleased to say this has now been completed, and everything is again in full working order. The 20 tons of silver lead ore was forwarded to Messrs. Goodhart and Co. on Saturday last (the 16th inst.), and every effort is being made to get another sampling ready at the earliest possible date.

NORTHERN.—Thomas Tonkin: The adit level operations consist of a drivage east from Gin shaft into the coal sills, and underhand stopes on tribute in these same sills. The former is in hard ground, which, however, yields some good saving work, and the latter usually, as now, yields 8 cwts. of ore to the fathom. The 15 level workings, west section (on tribute), are in easy ground of a very changeable nature, yet the average yield is 8 cwts. of ore to the fathom. The ground in the flats, east section, is not at present to value, being hard and poor. We are sinking from the 25 level, west of Gin shaft, to meet the rise from the bottom of quarry hazel sill; this will both prove and ventilate the ground. There is a little ore in the rise, and we are taking down the lode further back in the level, where some good saving work is being obtained. The run of tribute stopes above the 42, west section, gives an average yield of 8 cwts. of ore to the fathom, and the tribute ground, east section, 10 cwts. to the fathom. Other operations move on as usual, though our dressing is retarded in consequence of the scarcity of water which the long drought has occasioned.

NEW KITTY.—Wm. Vivian, July 21: We have forked the water and cleared the engine-shaft, divided and cased the shaft, and put down footway to the 22. I have seen a report given by the former workers, stating the bottom level was 22 fms. below the adit level; but we have not yet seen anything of the level, although we are daily expecting to come on the bottom level.

NEW GREAT WHEAL VOR.—H. Cowling, July 20: Splendid stuff is coming up from No. 2 shaft. I was admiring the rocks of gossan and prian mixed with tin; I picked out two stones to van on the shovel, and a beautiful van they made. Capt. Bottrell (a very old man) called to see me, and he said that about 30 or 40 fms. to the north of our present workings there is a lode 7 ft. wide, and tinny throughout. I would not exchange New Great Wheal Vor for Dolcoath, although so rich a mine and universally known as such. I never saw such a rich lode so near the surface. If the lode holds its present width we shall on getting down a few fathoms commence to stope, and a few men will keep the stamps going. Yesterday, when I was vanning the work, the old man made me laugh, saying—"Look! see the beautiful stuff. I am sure a few feet deeper you will have a course of tin." If I wrote all day I could not praise our lode too much. I have seen six men in an hour who came to look at our works; one of them (an old miner) said to me—"it is a wonder that this very valuable property should have remained overlooked for so long a time, considering the mining agents and working miners live almost in our grant." We are pushing on as fast as possible, our attention being chiefly directed to No. 2 shaft, in which there is a lode quite 4 ft. wide, producing rocks of gossan of the most splendid character, and rich work for tin. We have, however, 7 or 8 ft. more to sink before we reach the No. 1 level in tin ground. In sinking the last 2 ft. the lode has improved; it is more settled, and produces more tin. When this shaft is a little deeper in the heart, so to speak, of the tin ground we shall have stopes before us all the length of the mine, to be worked independently of any water pumping charges.

NEW WEST CARADON.—Wm. George, July 20: Having inspected the present workings of this mine and taken a general review of the prospects of future development, I beg to hand you the following report:—Richard's shaft is sunk on Downing's lode, which has evidently been very productive in this part of the mine, and there is yet a good deal of ground to be proved. At the 42 a level has been driven on the caunter lode to Hallett's cross course, where a cross-cut is put out north to the main lode. On this a level has been driven west about 8 fms., and while it has varied in width from 2 to 4 ft., it has yielded from 1½ to 2 tons of ore per fathom. At present the lode seems a little disordered in the end, but I think this is only temporary; lode now worth 1 ton per fathom. The rise in the back of this level, some 4 or 5 fms. behind the end, is up about 3 fms., where the lode is 3 ft. wide, worth 2 tons of ore per fathom, and has a very promising appearance for yielding remunerative quantities of ore. In driving east on the lode they are scarcely yet out of the influence of the cross-course, but it is forming regular, and looks kindly for soon becoming equal to the western drivage; it is now worth ½ ton per fathom. The cross-cut south from the skip-road shaft is being driven by six men, in which the ground seems rather more favourable for driving, and for the future of the mine it is highly essential this should be urged to communicate with the south lode as soon as possible, as there is no means of getting away, the ore at present being broken before this is done, and other places of trial must, therefore, remain in abeyance; but when this communication is made, it is evident to my mind there are good chances of laying open profitable ground. The main lode above referred to being whole to surface, with a long extent of unexplored ground to the west, the driving of the shallow cross-cuts to intersect it will then doubtless have consideration, as well as deeper trials on this and parallel lodes, and considering what those lodes have done to the east, that parallel lodes were so productive immediately to the north, and that you have the same cross-courses in a similar channel of ground. With no watercharges to meet, I think there are good chances of laying open a profitable property.

NEW WEST CARADON.—N. Richard, July 20: The lode in the 22 west of Hallett's cross-course will yield about 1 ton of ore per fathom. This lode at this level, east of cross-course will yield about 1 ton of ore per fathom. Same lode in the rise in the back of this level will yield fully 2 tons of copper ore per fathom, and indications good for further improvement. The men will this day complete the laying down tramroads in the 38 cross-cut south of Hallett's shaft. We shall now be in a good position for bringing away the ore, &c., when a communication is effected. This we hope to accomplish within the next month.

NORTH D'ERESBY MOUNTAIN.—R. H. Vivian, July 21: We are making good progress in sinking the shaft under No. 1, now down 4 fms. Having reached the footwall of the lode we shall now sink on its course; the lode is of the same value as for two weeks past. The lode in the level driving north maintains its value; it is producing quite as much lead ore as at any previous time, and shows no signs of falling off.

NORTH GREEN HURTH.—W. Vipond, July 15: There is no particular change in the lower level unless it be that the ground is getting firmer as it gets further on. Driven last month by four men 5 fms. 5 ft. The upper level is going on about as usual. The men can go under cover with this anytime now, but they find it better to yet to work it down from the surface. It is now in from the level mouth 10 fms. 3 ft. There are 33 fms. to drive yet to cut the vein, but as it is easy for driving, it will fast work up to it underneath where the ore was got in the quarry. I am fully confident that we shall begin to get ore from this level as soon as this point is reached.

NORTH HERODSFOOT.—T. Trelease, July 21: The shaftmen are making very good progress in securing the shaft and fixing the footway, &c. The No. 1 stope in the back of the 80 is yielding 8 cwts. of silver lead ore per fm. I have put the men from the No. 2 stope in back of the 80 to drive the end north. We have broken some very good stones of lead from the end this week, but the lode appears to be disordered at present, and is not so well defined as it is in the No. 2 stope. That stope remains at the same value as reported last week—*i.e.*, 30 cwts. per fathom. When we get our crusher to work we shall again put men to work the No. 2 stope. The stope in the 50 continues to yield 5 cwts. of silver lead per fathom. There is still a large amount of quartz in the cross-cut at this level, and I am still of the opinion that we shall find the lode in this direction. We are now preparing to fix jiggers, &c., for dressing purposes, and shall soon get a parcel of ore for sale when they are ready to work. P.S.—The No. 2 stope is in Doney's land, and not Dowey's, as reported in last week's mining papers.

OKEL TOR.—H. N. Lay, July 20: The new shaft east is sunk 7 fms., and securely timbered; so far our progress has been admirable. The new shaft west is now down 42 fms. from surface. All the stopes in the mine are looking very well.—Tin Plant: The engine-house will soon be completed. The excavations for the boiler-house have been attended with more than ordinary toil, the rock cropping up to the grass, and its excessive hardness yielding only to blasting inch by inch. The engine and boiler have been successfully taken down and removed from Wheal Arthur, and are now on the spot awaiting the masons. We are pushing on day and night.

PANDORA.—H. Nottingham, July 20: New Lode, 45 fathom level: The shaftmen are still working in the new stope, south of shaft, which is worth 2 tons of lead per cubic fathom. The new working barrel, &c., we are having from the foundry for the 8-in lift at the 45 has been invoiced forward, and will be here to-day or to-morrow. We shall then commence fixing the pitwork, new rods, &c., down from 33 to 45, and change the rods at 23 also. The 45 driving south is steadily improving. The lode is widening, and showing a good mixture of lead throughout; worth 25 cwts. per cubic fathom, and letting out a good deal of water, which we like to see. The stope north of shaft is worth 1 ton of lead and 1 ton of blende per fathom. In the 33, the winze sinking north of shaft is showing a good rib of blende, with a little lead, but not enough to value. No. 1 stope south at this level is worth 1 ton of lead, and same of blende, per fathom. No. 2, 10 cwts. of lead and 15 of blende, and No. 3, 12 cwts. of lead and 1 ton of blende per fathom.—Surface: Winding, crushing, and dressing is going on well and without interruption. We have both the new machines working and giving us entire satisfaction. The upper reservoirs which we run for winding and crushing, are lower than we have had them before for this summer, so that I fear we shall run short for the winding-wheel. We have plenty on the Bodlake side for pumping. It takes a large stream of of water to drive all the machinery, as we are now doing.

PANT-Y-MWYN.—E. Parry, July 21: We are glad to inform you that the lode in the 22, west of Modlyn, gets bigger, softer, and more kindly in character as we advance. We have passed the first cross-joint, which has produced this favourable change. The next joint is some 4 to 5 fathoms ahead of us. When we get the west side of that we fully expect a rich lode, and the mine to wear a bright aspect; this level is being pushed on by eight men, who have driven 9 ft. in the last week. We have four tributers at work, at an average price of 102s. per ton, and earning fair wages.

PARYS COPPER CORPORATION.—T. Mitchell, July 21: We have cut a strong feed of water in the 90 cross-cut south this week, and good stones of copper ore are often met with in this driving. The forebreast presents a very promising appearance. The 90 west of cross-cut is also looking kindly and producing about 1 ton of good copper ore in a fathom. The 90 east of cross-cut contains small branches of copper and patches of sulphur, producing a little saving work. The 90 driving east of the cross-course continues to yield 1½ ton of copper ore in a fathom. The ground is rather close here at present, but we are expecting the ground will get easier, when there will be a chance for the lode to improve. We have no change to notice in the 90 west of cross-course. All other points looking much as usual.

PENHALLS.—S. Bennetts, R. Harris, July 16: The lode in the rise 70 east is worth 6*l*. per fathom. In the 60 east it is worth 5*l*. per fathom; the winze below this level is down on the downright fault. The 55 east is worth 7*l*. per fathom, and the 45 west is poor; elsewhere there is no change to notice.

PENNANT.—July 21: The 80 is now better for progress, and the lode is improving. Our various stopes are turning out stuff as for a long time past, and we are very busy on the dressing-floors.

PEN-YR ORSEDD.—G. Bellis, R. Prince, July 21: In the 150 north cross-cut the ground is very jointy, containing a good deal of spar, with a little congenial clay in the interstices of the rock, the shale bed having most probably thrown the lode further north it will be so much nearer the master lode, and as both lodes dip towards each other it is almost certain that a large deposit of ore will be found at the junction; the ground is favourable for drivage, and good progress is being made. In the south cross-cut the beds have commenced dipping very fast, the face showing to-day large patches of spar; these may be taken as indicating our proximity to a lode. The water is easily kept under, and as the Halkyn Deep Level have commenced cross cutting towards us we may expect it to give us still less trouble, and shortly to be relieved of it altogether.

PHŒNIX UNITED.—J. Truscott, H. Harvey, J. Hosking, J. Rundle, July 22: Setting Report: Old Sump Shaft: The 130 to drive west, by six men, at 7*l*. per fathom; this end is now through the cross-course, and we are at present driving to intersect the lode, which is heaved by it. The 120 to drive west, by six men, at 17*l*. per fathom; lode worth for part carried (6 ft.) 20*l*. per fathom. To stope the back of this level, by four men, at 4*l*. per fathom; lode worth 15*l*. per fathom. The 110 to drive west by side of lode, by four men, at 5*l*. per fathom. To stope the back of this level, by three men, at 3*s*. 6*d*. per ton; worth 20*l*. per fathom. The 100 to drive west, by six men, at 12*l*. per fathom; worth for part carried (6 ft.) 15*l*. per fathom. No. 1 stope in back of this level, by four men, at 4*l*. 10*s*. per fathom; worth 12*l*. per fathom. No. 2 stope in back of this level, by four men, at 5*l*. per fathom; worth 15*l*. per fathom. The 100 to drive west of West's shaft, on north side of lode, by four men, at 8*l*. per fathom. The 80 to drive west of West's shaft, by four men, at 16*l*. per fathom; worth for part carried (6 ft.) 15*l*. per fathom. To stope the back of this level, by four men, at 3*l*. 5*s*. per fathom; worth 20*l*. per fathom. The 80 to drive west on the north side of lode, by two men, at 5*l*. per fathom. The 60 to drive west of West's shaft, by four men, at 11*l*. per fathom; lode unproductive. To stope the back of this level, by four men, at 3*l*. per fathom; worth 15*l*. per fathom. The 50 to drive west of West's shaft, by two men, at 4*l*. per fathom; this end is not yet through the cross-course. To stope the back of the 40, east of West's shaft, by six men, at 5*l*. 10*s*. per fathom; worth 20*l*. per fathom. The 30 to drive west of West's shaft, by four men, at 11*l*. per fathom; worth for part carried (6 ft.) 14*l*. per fm. No. 1 stope in back of this level, by six men, at 3*l*. 15*s*. per fathom; worth 25*l*. per fathom. No. 2 stope in back of this level, by four men, at 6*l*. per fathom; worth 20*l*. per fathom. The 20 to drive west of old sump shaft, by four men, at 11*l*. per fathom; lode unproductive.—Western Mine: New Engine-Shaft: The 112 to drive west, by four men, at 19*l*. per fathom; lode unproductive. The 112 to drive west, by two men, at 2*l*. 15*s*. per fathom; worth 5*l*. per fathom. The 50 to drive west, by four men, at 14*l*. 10*s*. per fathom; worth 5*l*. per fathom.

No. 1 stope in back of this level, by four men, at 3*l.* per fathom; worth 15*l.* per cubic fathom. No. 2 stope in back of this level, by four men, at 3*l.* 10s. per fm.; worth 19*l.* per fathom. The 40 to drive west, by four men, at 17*l.* per fathom; worth for part carried (6 ft.) 30*l.* per fathom. To stope the back of this level, by six men, at 6s. per ton: worth 10*l.* per cubic fathom. To rise in back of this level, by four men, at 11*l.* per fathom; worth 5*l.* per fathom. The 20 to drive west, by four men, at 3*l.* 10s. per fathom; this end is in granite. The 60 to drive east of Stow's shaft, by four men, at 16*l.* per fathom; lode unproductive. Seven pitches were also set, at tributes varying from 8s. to 13s. 4d. in 1*l.* for tin and copper.

PIONEER.—H. B. Vercoe, July 21: Silver-Lead Mines, Holywell: At Bessie's shaft during the past week the 40 yard level has been driven south on flat about 5 yards, the whole distance through lead ground, and from which we have risen a large heap of stuff for the dressing-floors; the end to-day has improved, and shows larger lumps of ore than we have seen for some days past, and dressing of ore will be at once resumed when water is available. At Blackwell shaft the 100 yard level cross-cut has been driven north in the past week about 3 yards, the ground has become rather harder, but has not yet reached any well-defined footwall. I think, however, it is not far off, and expect before the end of the month to commence driving east and west on the course of the Pant-y-Pydew lode. The sinking of this shaft has been suspended for the last three or four days, the men having been engaged casing and dividing the shaft, and making ready for winding with the engine. The portable engine, winding drum, and pit head have been fixed, and all being well we shall get steam up to-morrow. Sinking will now go on much more expeditiously, and I hope soon to announce a discovery of lead at this shaft. At the engine-shaft the water has been drained from the 75 yard level east, and the level cleared and secured for about 15 yards. We have also got the water out of the lead sump in sole of the 75 east to a depth of 6 yards; at this depth we find a level has been driven, but how far cannot yet say. You may, however, rely upon my being able to give you full particulars as to the great course of ore in the bottom of this sump by the end of the month, if not sooner. In the 60 yard level the sump is now in regular course of sinking. The lode produces fine detached lumps of lead, and promising for a great improvement. I might here mention that the main deposit of ore in the swallow is a few yards further south than where we are sinking, and as we gain depth the ore will dip towards and into it, present depth of sump 7 yards below the 60 yard level; as there will only be 8 yards to sink to reach the depth of the 75 yard level I advise to be sunk, and the 75 yard level to be driven east to it. This will open out a rich section of lead ground, and also thoroughly ventilate this portion of the mine.—Copper and Lead Mine, Harlech: Since my last very little has been done in the sump below deep adit on lead lode, the men having refused their bargain; they have now taken it, and are at work. In the cross-cut towards new copper lode there is no change, but I am daily expecting to intersect the lode.

POLROSE.—W. Bennetts, July 20: The lode in the 100 east continues of a strong character; it is fully 3 ft. wide, yielding saving work for tin, and has improved a little in the last few feet driving. I find from the dialling that the 100 cross-cut bore, a little to the east house, the western end has had further to drive to reach the cross-course, that the ground is now just about spent, and the lode being disordered I hope we shall soon be through the cross-course. There is no change in the 90 west; the lode is the same size as last reported, and produces a little tin, saving work. The men are making their usual progress in the 90 cross-cut south; there is no change to notice here. In the 90 cross-cut north we have an increase of water. We have cleared the western adit on the caunter lode, about 10 fms. beyond the shaft holed last week; the men at present are timbering the back of the level where the ground has crushed together.

PRINCE OF WALES.—S. Roberts, G. Rowe, July 20: The ground in Watson's engine-shaft, sinking below the 90, is of a good description for the production of minerals, and the progress in sinking very satisfactory. The lode in the 90 east is still showing a very promising appearance, and yielding good quality copper ore to the value of 10*l.* per fathom, which we purpose cutting into and taking down so soon as the level is cleared of stuff, which we calculate will be to-morrow. The lode in the rise in the back of this level (the 90) has not been taken down during the past week. The lode in the 90 west is over 4 ft. wide, producing rich quality copper ore and fine stones of tin to the value of 15*l.* per fathom, and showing indications of improvement. The tribute department is improving both in tin and copper. All other points in operation are without change.

ROMAN GRAVELS.—Arthur Waters and Son, July 21: There is no change of note for the last week or two in the 125 north or south of new engine-shaft; the 110 north of old shaft is worth 1 ton per fathom. The 110 south of new shaft is in a lode 6 ft. wide, worth quite 2½ tons per fathom. The 95, south of the above, is also in a strong lode, worth 2½ tons per fathom. The 80, south on middle division of the lode, is worth 1 ton per fathom. The winze below this level, down about 10 fms., is worth 3 tons per fathom. The 80 cross-cut west, towards big spar lode, is not yet far enough to reach the object. The 65, south on east portion of the lode, is worth 6 tons per fathom. We shall start a new winze in this level next week in a rich run of ore ground. The 50 south is worth 1 ton per fathom. The 40 winze is holed to said end by borer. Stopes generally as for months past. We have to-day sold 100 tons lead ore for 930*l.*, and shall sample another 100 tons next week.

SILVER HILL.—George Rickard, July 20: Since last week's report we have made good progress in advancing the tunnel north towards the lodes, and have driven about 6 fms. through a clay-slate formation of a metalline character, with branches consisting of gossan and friable spar, intermixed with mundic and copper ore of good quality occasionally crossing the drivage. The kind of ground is very similar as that seen in the neighbouring mines where the greatest deposits of silver ore have been found, and will be conducive, in my opinion, of rendering the lodes very productive in this property. The water is still coming freely through the ground in the forebreast of the tunnel. These indications, together with the mineralised character of the ground, lead me to expect that a lode may be met with any day.

SILVER VALLEY.—James Bray, July 20: We are pushing on with the clearing of the main adit level as fast as possible. In amongst the old debris we find some very rich stones of silver lead. The north and south lode, which is considered to be the East Wheal Rose lode, is about 3 ft. wide in the bottom of the level, and contains one mass of pyrites and silver lead. We cannot see much of the east and west lodes yet as the level going west is broken down; but we hope to be able to get in and dial these lodes by Thursday or Friday next, when we shall be able also to determine the best possible point for sinking the engine shaft so as to command the lodes by short cross-cuts. I have had a great deal to do with silver-lead mining, but I must say that I have never seen a mine presenting more favourable indications of a lasting and productive property as here presented. We shall lose no time while the fine weather continues to get the buildings up and the engine-house erected.

SORTRIDGE.—W. Skewis, July 20: The deep adit is cleared 25 fms., leaving 10 fms. more to reach the point of choakage, and we are using every available means to clear this as quickly as possible.—Criper's Shaft: The lode here is improving in appearance, and now produces strong stones of mundic and copper.—Engine-Shaft: I have been down this again to-day, and examined the 30 west, and found it to have been driven a considerable distance through a large lode, from which in several places I broke some very fine specimens of copper ore, and I am of the opinion that we shall find a long run of valuable ore ground to have been left in this part of the mine by the former workers, and which we shall find to be of great value to this company. I have strong reasons to believe that there is another lode about 3 fms. south of the above-named lode, and I have, therefore, put men to cross-cut to the same, and am of opinion that this will be found to be the same lode as that in Criper's shaft. The more I see of this mine the more strongly I am convinced that it will prove to be a large and profitable one even for copper alone, and for which the company commenced their research; in addition to this, however, I find in course of operation that there is a large quantity of profitable tin ground available, and I am of the opinion that as the work goes forward equally good discoveries will be for tin or for copper, therefore I consider that the workings hitherto carried on have only been preliminary to those required for the opening up of a great property.

SOUTH CONDURROW.—W. Rich, W. Williams, Humphrey King, July 20: The lode in the 93, east of King's, is worth 8*l.* per fathom. The 80, east of King's, is suspended for the time. The 80, east of Plantation shaft, is worth 12*l.* per fathom. The 70, east of King's, is worth 7*l.* per fathom. The ground is moderately easy for driving in the 70 cross-cut south; we have a small course in the end which facilitates the progress. The 60, east of King's, is worth 18*l.* per fm. The 60, west of Plantation, is worth 10*l.* per fathom. The 50 end, east of King's, is worth 12*l.* per fathom. The stope in the back of this level is worth 12*l.* per fathom. In the bottom of the 50, east of Plantation shaft, we have put down a trial winze on a lode which crosses the main tin lode at this level; the winze is down 7 fms., and the lode in this winze has an underlie of about 3 ft. in a fathom south, and is 2½ ft. wide. It carries tin and good stones of copper, worth about 6*l.* per fathom, the price for sinking being only 50s. per fathom. We are clearing the 63 with the view of reaching this lode at a deeper point. The sinking of Marshall's shaft below the 30 is being urged on. The rise in the back of the 42 towards this shaft is worth 10*l.* per fathom.

SOUTH DARREN.—Henry James, July 21: Setting Report: To complete the sinking of Bishop's shaft from the 120 to the 130 by nine men, at 23*l.* per fathom. To drive the 120 east by four or six men, at 9*l.* per fathom. To drive the 120 west by six men, at 9*l.* per fathom. To drive the 110 east by four men, at 8*l.* 15s. per fathom. A stope in back by four men, at 4*l.* 10s. per fathom. To drive the 110 west by six men, at 9*l.* 10s. per fathom. Two stopes in back by 12 men, at 4*l.* 10s. per fathom. A stope east of footway by four men, at 4*l.* 5s. per fathom. Sinking a winze below the 100 by six men, at 12*l.* per fathom. There are five pitches in the upper levels being worked by 17 men at an average tribute of 7*l.* 4s. per ton for dressed lead ore and 30s. per ton for copper ore, tributers to pay 1*l.* per ton for dressing. The filling of the skips by three men, at 7s. 9d. per 100 skips. The landing by two men, at 5s. 6d. per 100 skips. Two men at the drawing machine at 7*l.* 10s. per month. Spalling of the orestuff for the crusher at 11*l.* per month. In the shaft we are sinking by the side of a strong orey lode, which we shall put a blast in now and then to prove as the sinking is being proceeded with. There is scarcely anything new in the 120 east, the lode being pinched up small by a cross-joint, the influence of which we have not yet got through. In the same level driving west of shaft the lode is 2 ft. wide, containing a good mixture of lead ore, and getting better every day; I expect we are now near under the run of good ore ground wrought upon in the 110. We have a fine strong and promising lode in the 110 east worth for lead and copper ores 20*l.* per fathom. A stope in back of this level is worth 10*l.* per fathom for lead and copper ores. The lode in the 110 west is more compact, worth 10*l.* per fm., and improving as we go forward. Two stopes in back of this level, west of footway, are worth each 35*l.* per fathom for lead and copper ores. The stope east of footway is worth 10*l.* per fathom. The lode in the 100 winze is worth 15*l.* per fathom. The drawing and dressing is going on without interruption, with a fair supply of water, but not sufficient without the assistance of the engine. All the machinery is in good working order.

SOUTH DEVON UNITED.—Wm. Hooper, July 21: Setting Report: The 110, east of Brook engine-shaft, has been driven the past month 3 fms. 5 ft. 8 in.; set to six men, at 9*l.* per fathom; the lode is 5 ft. wide, composed of capel, quartz, mundic, and copper ore, with a value of 25*l.* per fathom. No. 1 stope, in the back of this level, is set to two men, at 2*l.* 10s. per fathom; the lode is 3 ft. wide, with a value of 7*l.* per fathom. No. 2 ditto is set to four men, at 2*l.* 15s. per fathom; the lode is 2½ ft. wide, with a value of 10*l.* per fathom. The 110, east of Brook engine-shaft, has been driven during the past month 1 fm. 1 ft. 6 in.; set to four men, at 8*l.* per fathom; the lode is from 4 to 5 ft. wide, composed of capel, mundic, and copper ore, with a value of 8*l.* per fathom. The stope in the back of this level is set to two men, at 4*l.* 10s. per fathom; the lode is 5 ft. wide, with a value of 12*l.* per fathom. The 90, east of Brook shaft, has been driven during the past month 1 fm. 1 ft., set to two men, at 8*l.* 10s. per fathom; the lode is 5 ft. wide, composed of capel, quartz, mundic, and copper ore, with a value of 12*l.* per fathom. No. 1 stope, in the back of this level, is set to four men, at 3*l.* 10s. per fathom; the lode is 3 ft. wide, with a value of 10*l.* per fathom. No. 2 ditto is set to four men, at 3*l.* 5s. per fathom; the lode is 3 ft. wide, with a value of 7*l.* per fathom. The 80, east of Brook engine-shaft, has been driven during the past month 1 fm. 2 ft. 8 in.; set to four men, at 12*l.* per fathom; the lode is 5 ft. wide, composed of capel, quartz, mundic, and copper ore, with a value of 8*l.* per fathom. No. 1 stope, in the back of this level, is set to four men, at 3*l.* 5s. per fathom; the lode is 3 ft. wide, with a value of 14*l.* per fathom. No. 2 ditto is set to four men, at 5*l.* per fathom; the lode is 5 ft. wide, with a value of 10*l.* per fathom. No. 3 ditto is set to two men, at 4*l.* 10s. per fathom; the lode is 4 ft. wide, and worth 8*l.* per fathom. The lode in the adit, west of old sump-shaft, is without change since last reported on; the lode is from 3 to 4 ft. wide, composed of gossan and spots of copper ore.—Surface: The new or Martin's shaft has been sunk during the past month 2 fms. 4 ft. 5 in.; set to nine men, at 16*l.* per fathom; the shaft is now down 17 fathoms. I am sorry to say during the past week our water for dressing purposes has considerably fallen off—in fact, I have never known it so scarce as at present; we are unable to work more that three jiggers and at times scarcely enough for those—we cannot stone break and crush at one time, therefore, as you may suppose, the above must be exceedingly low, however we are doing our best in getting as much as possible for our next sampling. We hope to have the cage and gearwork for the steam-whim in a short time from the foundry, when with an increase of water for dressing we shall be in a position to considerably increase the returns of copper ore, also to utilise the present machine in hauling the stuff from Martin's shaft, which will greatly facilitate this important piece of work.

SOUTH FRANCES.—Charles Craze, July 18: Pascoe's Shaft: The lode in this shaft is looking well, and worth fully 40*l.* per fathom for 12 ft. long, with no north or south wall. The 215 west is looking better, and worth 12*l.* per fathom. The 215 east is rather improved in appearance, and worth 10*l.* per fathom. The 205 west is worth 8*l.* per fathom. The rise in back of the 195 is worth 10*l.* per fathom. The lode in the 185 west is considerably improved of late, and is worth for the part carried 18*l.* per fathom, with more lode standing north and south. In the 185 east we have commenced to drive a cross-cut to get under Marriott's shaft. The rise in back of the 185, east of cross-cut, is worth 12*l.* per fathom. The 175 east, coming in over this ground, is worth 10*l.* per fathom. The rise in back of the 175 west is worth 12*l.* per fathom. There is no change in the stopes or pitches throughout the mine to notice. Mine looking well. We hope to have the new cylinder, &c., for the stamps on the mine in about a week, when we shall proceed at once to put it in, and also to erect the new axle with 16 additional heads of stamps, which will enable us to increase our returns of tin.

SOUTH TOLCARNE.—Thomas Angove, Samuel Arthur, July 20: Our shaftmen are at present employed in fixing a plunger-lift at the 60, which we hope to complete in four weeks. The 60 end east we are driving south through a part of the flat lode, which is producing some rich tinstone. We have driven 7 ft. through the lode without discovering the south wall. In the 60 end west the lode is large, producing tinetone of low value; we are not carrying all the lode in this end. The 50 end east, driving on Fraser's lode, is producing saving work. Our tin stopes are without much alteration.

SOUTH WHEAL CREBOR.—J. Goldsworthy, July 20: The ground in the 46 cross-cut north continues spare for driving; from the appearance of the ground to-day, I fully expect to see a change for the better in a few days. The quartz veins in the elvan contain copper ore. The lode in the rise in the back of the 16 is worth fully 10*l.* per fathom for copper, and is very promising.

TAMAR (Silver-Lead and Fluor Spar).—R. Goldsworthy, July 21: Saturday being setting and pay-day the following bargains were let:—To drive the 57 fm. level south by four men at 6*l.* 10s per fathom; the lode is 4 ft. wide, and has a very fine appearance, producing 3 tons of fluor spar per fathom, and saving work for lead. To sink the winze in the bottom of the 37 fm. level by six men at 10*l.* per fathom, lode 3 ft. 6 in. wide, worth 5 cwt. of rich silver-lead and 2 tons of fluor spar per fathom, and promising for further improvement. To drive the 27 fm. level cross-cut by four men, at 11*l.* per fathom. The ground is very wet, and in the joints we find faces of mundic and spots of lead, showing the ground is of a congenial character for the production of lead ore. To drive the 27 fm. level south by four men, at 6*l.* 10s. per fathom; lode 4 ft. 6 in. wide, and has a very masterly appearance, producing 3 tons of fluor spar and rich stones of silver-lead. There is every reason to believe, as the end is extended south, it can scarcely fail to lay open a valuable mine. For the more rapid development of this part of the property we started a new shaft on Saturday, which is calculated to take the lode about the 20 fm. level; this will be pushed down as fast as possible.

TANKERVILLE GREAT CONSOLS.—A. Waters and Son, July 21: Tankerville: The new vein, No. 1 north lode, at the 220, east and west of Watson's shaft cross-cut, maintains its width and character, and we are expecting to intersect the same lode in the 206 and 192 cross-cuts shortly. Should this great lode turn out as present indications point to, we shall have a new mine here. The stopes throughout the mine, seven in number, are worth 8½ tons per fathom. Other points as for some time past.—Pennerley Mine: The water is drained 37 fms. 4 ft. below the 80, and we hope to have the plunger lift at the 20 secure above the water by to-morrow night. We have commenced driving the water out of the 80 winze on Warm Water lode, where there is a good run of ore ground. Surface work going on well.—Bog: The water is now 8 fms. 3 ft. 6 in. below the 60, and so far the shaft is in good condition. We are clearing and securing the 60. No change of note in the drivages east of Buntin's shaft.

TAVISTOCK GREAT CONSOLS.—H. Treganowan, July 14: Since our last report the men have driven 4 fms. on the course of the Rix Hill lode. The end is now 7 fms. west of the cross-course. I am very pleased to inform you that the lode has improved in the last few days' driving.

— H. Treganowan, July 18: The men are still driving west on the course of the Rix Hill lode. I am very pleased to say it is at this point 3 ft. wide, composed of capel, quartz, peach, arsenical mundic, and yielding rich stones of tin.

TEMPLE.—July 20: The driving of the adit level on the Champion lode is being pressed on with the rock-boring machines, which continue to work satisfactorily; the lode continues of the same favourable character, but no lead has yet been met with. We are delivering a parcel of blende which was sold last week—about 20 tons.

TREBARTHA LEMARN.—J. Gifford, July 21: We are pushing on the deep adit level with all speed by a full pare of six men, so as to get under the good sheet of tin in the bottom of the shallow adit. Lode in the present end 1½ ft. wide, yielding good work for arsenical mundic and tin ore.

TREVINCE CONSOLS.—John Mayne, July 21: New shaft: Wheal Moor lode is quite as productive as reported last week.—New lode: I am pleased to say this is a large lode fully 10 ft. wide, producing copper, mundic, and gossan; a splendid lode, and improving every foot it is being sunk upon, and no doubt in a few fathoms deeper it will be a large course of copper ore. Also, looking at the fact that this lode underlies south, and the middle lode underlying north, these will form a junction between two large crystalline elvan courses, strengthens my opinion considerably daily as to the value of the property. No other change to remark.

VINCENT.—Engine Shaft: The shaft has been cleared to the bottom of the 30, and a tramroad laid 33 fms. in the level; the total distance from the shaft to the end is 44 fms. 3 ft., and the lode varies from 1 to 4 ft. in width; the lode in the 30 end is small at present—it seems to be pinched up with a rib of hard ground, but will, in my opinion, soon open out again. This end has been driven 14 fms. through a lode 4 ft. wide, very rich for tin. I think it advisable to sink a winze in the bottom of the 30; a winze (say) 10 ft. long will yield 12 cwts. of tin to the fathom for the length of the winze—we shall be getting tin and proving ground at the same time. In the stope in back of the 30, and over the proposed winze, the lode is about 4 ft. wide, and the 44 tons of orestuff out of stope is stamped, dressed, and the tin weighed. There is 1 ton 3 cwts. 2 qrs. 14 lbs. first-class stuff, and as far as can be seen the lode is better in the bottom of the level than in the back. The proper course would be to sink the engine-shaft and drive a 40 fm. level, and if done, and the level extended west as far as this shoot of tin, it is my candid opinion that this will be a rich and profitable mine.—Horseborough Shaft: This shaft is sunk 3 fms. 4 in. below the 15, making a total depth from surface of 18 fms. 4 in. The 15 east has been driven 13 fms. 3 ft., in a lode varying in size from 1 to 1½ ft. wide, and carrying some tin. The 15 fm. level west has been driven 17 fms. 5 ft.; the lode in the end is fully 2 ft. wide, composed of quartz, arsenical mundic, rich spots of copper, and worth for tin 250 lbs. to the fathom, and the lode very promising for improvement; I strongly recommend the driving of this end. The new hauling machinery has been started at engine-shaft, and is working very satisfactorily. All machinery and pitwork are in good working order.

WEST ASSHETON.—Joseph Garland, July 20: The 92, west of boundary shaft, was driven 3 fms. 5 ft.; the lode is now 3 ft. wide, composed of bands of quartz and killas, carrying a little lead and copper ores—the ground is a little easier for driving. The 70 west was driven 4 fms. 1 in.; the lode for the last fathom or two has been small, and without ore of consequence; we have commenced to drive a few feet into the footwall to see if there is any more lode standing south. The ventilation having become very defective we purpose commencing a rise to the 60 shortly to improve the ventilation, and to prove the lode at a very promising part. The intermediate level, east of footway rise, under the 40, was extended 1 fm. 4 ft. 6 in., in a lode which in the early part of the month would yield 1 ton of lead ore to the fathom, but which is at present without value. The stope west of the rise yields about ¾ ton of lead ore per fathom. We have five tribute pitches, working by 13 men and boys—four at 8*l.* per ton, and one at 3*l.* 10s. per ton of dressed lead ore. We shall sample 20 tons of lead ore on Wednesday next. Yesterday we sampled 50 tons of blende, for sale on the 27th inst.

WEST BASSET.—J. Nicholas, F. Hodge, July 20: Grenville Shaft: The lode in the 165 end west is worth 10*l.* per fathom. The stope in bottom of this level is worth 25*l.* per fm., and the stope in the back of this level is worth 15*l.* per fm. The 160 end west is still unproductive. The 155 end west is producing low-quality tinstuff, and is worth 6*l.* per fathom. The lode in the rise in the back of this level, and about 25 fms. behind this end, is worth 12*l.* per fathom. No. 2 rise in back of this level, and on the north part of the lode, is worth 6*l.* per fathom. The cross-cut driving south through the lode at this point is worth 10*l.* per fathom. No. 1 stope in back of this level is worth 15*l.* per fathom. No. 2 stope is worth 11*l.* per fathom. No. 3 stope is worth 13*l.* per fathom. We have risen the rise in the back of the 144 west 10 fms. high, and we are now cross-cutting the lode north at the top of it, where we have driven into the lode over 2 fms., and have not yet cut the north wall We find the lode for the present drivage worth fully 20*l.* per fathom. In driving north here we shall communicate with the 134. When this is done we shall lay open a large piece of stoping ground at this point. No. 1 stope in the back of the 144 is worth 30*l.* per fathom; No. 2 stope is worth 20*l.* per fathom; No. 3 stope is worth 18*l.* per fathom; No. 4 stope is worth 20*l.* per fathom; No. 5 stope is worth 20*l.* per fathom; No. 6 stope is worth 14*l.* per fathom. A stope in the bottom of the 134 is worth 10*l.* per fathom. The lode in the 134 east of open cutting and west of shaft is worth 5*l.* per fathom. The 124 end west is producing a little tin, worth 5*l.* per fathom. We have not yet met with anything in the cross-cut south at this level. The 124 end east of cross-cut is worth 10*l.* per fathom, and west it is worth 7*l.* per fathom. The 114 end east is worth 10*l.* per fathom. A stope in the bottom of this level is worth 11*l.* per fathom. We have not yet cut the lode in the 114 west. The 104 end east has much improved, and is now worth 12*l.* per fathom.—Percy's Shaft: The lode in the 180 end east is worth 15*l.* per fathom. The rise in the back of this level is worth 10*l.* per fathom. A stope in the back of this level is worth 14*l.* per fathom. The lode in the 170 end east is worth 10*l.* per fathom. A winze in the bottom of this level is worth 9*l.* per fathom. The lode in the 164 end east has slightly improved, worth 6*l.* per fathom. We have cut the north wall of the lode at the 114 end east, but we shall not be able to tell its value until we open it.—Old Skip Shaft: The 124 ends east and west are producing a little tin, but not sufficient to value. The lode in the rise in the back of this level is worth 12*l.* per fathom.—Thomas's Shaft: The 144 end east is producing a little tin, worth 8*l.* per fathom. No. 1 stope in the back of this level is worth 14*l.* per fathom; No. 2 stope is worth 10*l.* per fathom; No. 3 stope is worth 12*l.* per fathom; No. 4 stope is worth 12*l.* per fathom; No. 5 stope in bottom of this level is worth 10*l.* per fathom. We are pushing on the 164 cross-cut north with a full portion of men.

WEST CARADON.—N. Richards, July 20: Vivian's north lode, in the bottom of the 38, west of cross-cut, is slightly improved. No. 1 stope in the back of this level, east of this point, is also improved, and will now yield 2 tons of copper ore per fathom. No change to notice elsewhere since my last, all points fully maintaining their size and value.

WEST CARADON.—W. George, July 20: Vivian's North Lode: This lode has been driven on west from Hallett's cross-course from 18 to 20 fms., where it has produced from 1 to 2 tons of ore per fathom; about 6 fms. behind the end a rise is being put up, which will yield 2 tons of ore per fathom, but the ground on this lode being generally hard, the progress is slow. Nothing has been done below this level, and I have no doubt when a communication is made with the stopes in bottom of the 38, and better ventilation secured, attention will be given to working it, when I believe the lode will be found quite equal to what it has been over. In the 38 a stope has been put over the bottom 5 or 6 fms. in length, where the lode will yield 1 ton of ore per fathom, but I think it may be expected to improve shortly seeing there are droppers in the north making into it, which generally are feeders to this lode especially. In the rise above this level there is a very good lode, worth quite 3 tons of ore per fathom, and concurring with the opinion expressed by Captain Richards that the north part of this lode has not been seen over this point, I consider is one of importance, as there is a large extent of ground unexplored between this level and the surface that may prove very productive in shallower workings. A stope is being worked in the back of this level, east of the main cross-course, where the lode is worth 1½ ton of ore per fathom; here there is also a large section of ground standing to the 17, from which considerable returns may be expected.—Gilpin's Lode: The 38 is being driven west with the view of communicating with a winze sunk from the 27, which is about 7 fms. before the end. The lode above this point in the 38 has been very much disordered, I think by the influence of the cross-course near, but in the winze referred it was regular throughout, and produced some very good ore, at one time valued so high as 2 tons per fathom. A winze is being sunk below the adit, producing some good stones of ore, but not to value; it is intended to continue this winze to the stope from the back of the 17, now suspended as well as different other places on this lode for want of ventilation. These contemplated communications will effect this and thereby admit of laying open a long extent of unexplored ground, in which I think there are very good chances of meeting with profitable shoots of ore. I consider with the advantages connected in being able to work this extensive run of mines free of all water charges to the 80, and that above that level there is such an extent of unexplored ground on various lodes that have been so productive east of the cross-course, you have good prospects before you, and that the trials to be made are of such a nature as fully warrant the necessary outlay.

WEST CREBOR.—J. Andrews, July 21: We continue to make good progress in sinking the engine-shaft below the surface, the lode in which is still 2 ft. wide, yielding a little mundic, and spots of copper ore.

WEST DEVON GREAT CONSOLS.—George Rowe, July 20: The new engine shaft is cut down and made complete nearly 18 fms. below the surface, and the shaftmen are now busily engaged in fixing the necessary timber work to bring the whim kibble to the present bottom, with a permanent footway, &c., attached, all of which will be accomplished as soon as the nature of the work will admit, and the shaft in regular course of sinking on the lode, which is over 2 ft wide, of a most promising description of gossan and spar, intermixed with black oxide and yellow copper ore.

WEST GODOLPHIN.—T. Hodge, F. Hodge, July 20: The water is now drained 4½ fms. below the 50, and we are sorry to say that the packing of the 60 plunger is failing; at present we are just keeping the coming water. We are now preparing a drop-lift to reduce the hole, and hope to complete this in a few days without much extra cost. We set the 20 west end to-day in Hope lode, which produces good stones of tin, and is likely to improve as we extend. The carpenters are building our new water-wheel, and all other surface work is being pushed on.

WEST HOLWAY.—R. Rowlands, July 21: New Shaft: We shall be in full course of sinking this shaft next week. At the 110 west we have a splendid looking lode, worth for lead 1¼ ton to the fathom. In the 80 level west the lode is 3½ ft. wide, and worth 1¼ ton to the fathom. The lode in the rise in the 80 west maintains its strength and value, worth about 2 tons to the fathom.—Ram Shaft: The ground is becoming very jointy here, and I do not think we are very far from the lode. No other change.

WEST LISBURNE.—W. Northey, July 19: On my return to the mine I found everything going on satisfactorily, and the third and last lift of pumps for reaching the 36 dropped to the stuff to the point where we shall have to cut down the shaft to the full size, which will not take long to complete to the 36. The shaftmen are still going on with the new casing and dividing for bringing down machine-kibble, and all the rods, pumps, and the plunger bottom at the eastern shaft are being brought to surface and ready to be applied elsewhere when required. There yet remain 30 fms. of pitwork, rods, chains, &c., to be brought to surface from the middle shaft, but these will be in reserve, and not required for some time to come. At surface men are employed in completing the main drain for the surface water. The smith and carpenters are about general work. The wire-rope should be delivered on the mine as quickly as possible, as I have nearly completed the necessary connections for drawing with the engine.

WEST KITTY.—Wm. Vivian, July 21: In the 90 driving east the lode is about 2 ft. wide, producing good stones of tin. In the 72 driving east the lode is 4 ft. wide, worth 20*l.* per fathom. In the 72 driving west the lode is 3 ft wide, producing some rich tinstone. In the 60 driving east the lode is worth 30*l.* per fathom. In the rise in the back the lode is worth 25*l.* per fathom.

WEST LISBURNE.—N. Bray, July 19: On my return to the mine I found everything going on satisfactorily, and the third and last lift of pumps for reaching the 36 dropped to the stuff, to the point where we shall have to cut down the shaft to the full size, which will not take long to complete to the 36. The shaftmen are still going on with the new casing and dividing for bringing down machine kibble, and all the rods, pumps, and the plunger bottom at the eastern shaft are brought to surface and ready to be applied elsewhere when required. There yet remain 30 fms. of pitwork, rods, chains, &c., to be brought to surface from the middle shaft, but these will be in reserve, and not required for some time to come. At surface men are employed in completing the main drain for the surface water. The smith and carpenter are about general work. The wire-rope should be delivered on the mine as quickly as possible, as I have nearly completed the necessary connections for drawing with the engine.

WEST PATELEY BRIDGE.—David Williams, July 21: In the 56 north-west we appear to be passing through the "nip" referred to last week. The ground has become easier to work, and the vein is gradually improving, being at present 1 ft. wide, carrying limespar and barytes, with occasional spots of lead ore. We have commenced cross-cutting north from the 20, east of No. 2 shaft, to reach the junction of three small veins, which at this depth are generally found most productive.

WEST POLBREEN.—Wm. Vivian, July 21: In the cross-cut driving north at the adit level we have now got into light ground. I have been looking for this change in the country rock for some time past. I consider the indications good. A full report will be given at the meeting next week.

WEST VOR.—S. Harris, July 22: The adit level, driving east of cross-cut, on Sozen lode, which is 4 ft. wide, is producing saving work for tin, also good stones of copper and mundic. A more congenial natured lode cannot be seen; this level is driving by four men, at 9*l.* per fathom.

WEST WHEAL TOLGUS.—John Gilbert, July 19: Richard's Shaft: The lode in the rise in the 105, west of shaft, is 2 ft. wide, composed of spar and mundic and stones of copper ore. The lode in the winze sinking in the bottom of the 95, west of shaft, is 2 ft. wide, and yielding 1½ ton of lead ore per fathom. The lode in the stope in the bottom of the 95, east of No. 1 winze, is 3 ft. wide, yielding 3 tons of ore per fathom; worth 15*l.* per fathom. The lode in the stope in the bottom of the 95, west of shaft, is 3 ft. wide, yielding 2½ tons ore per fathom; worth 12*l.* 10s. per fathom. The 105, west of shaft, is suspended for the present, and the men put to rise in the back to communicate with the winze sinking in the bottom of the 95.—Taylor's Shaft: The 135, 145, and 155, west of shaft, are suspended, and the men put to assist the sumpmen to prepare for sending up the materials from the bottom of the mine. We sampled on Tuesday last (computed) 130 tons of copper ore.

WHEAL BOYS.—W. T. White, July 20: We are now busily engaged in fixing ladder road from the 20 to the 30 fm. level. As soon as this is completed we shall at once commence to clear out the 30, and make preparations for working the ground at that level, which we consider, as far as we have seen, to be of a promising character. We are raising some fair quality tinstuff from the adit end west, and have now communicated this level with a winze sunk in bottom shallow adit level. This has given us improved ventilation, and laid open a good section of stoping ground.

WHEAL COATES UNITED.—W. H. Martin, July 20: In the 80 south cross-cut we have intersected a part of the lode; it produces good stones of tin. This part is 3 fms. south of the regular course of the lode: we have cut in 3 ft., still in lode. The lode in the 70 east is looking more favourable; although it is still spare for driving it contains more tin than we have seen for some time. The lode in the 70 west is a little harder; however, every effort is made on this point so as to cut the cross-course as soon as possible. We are daily expecting to enter into more favourable ground. No. 3 risemen are assisting the pitman to put in stull with timber in the back of the 70 west. The lode in the 50 east is large and tinny throughout, epening up stoping ground. The stopes and tribute pitches are much the same as for some time past.

WHEAL CREBOR.—George Rowe, H. Phillips, July 19: The ground is squared down within 12 ft. of the 120 fm. level, and we calculate will be completed to the bottom of that level in the course of the coming week. After this work is accomplished the barrow-road and top plat will be cut, then the shaft sunk to a deeper level. The lode in the 120 fm. level east is 4 ft. wide, of a very kindly appearance, with mundic and ore to the value of 10*l.* per fathom. The lode in the stope in the bottom of the 108 fm. level west of winze, is worth 15*l.* per fathom. The lode in the 108 fm. level east is still showing a very kindly appearance, with friable spar and mundic, intermixed with ore. The ground in the new cross-cut going north at the 108 is of good description, and moderately easy for progress. The lode in the stopes in the back of the 108 west of rise is worth 30*l.* per fathom. No. 2 stope, in the back of the same level (108) east of said rise, is worth 70*l* per fathom; No. 3 stope, in the back of the same level (108), is worth 40*l.* per fathom; No. 4 stope, in the back of the same level east, is worth 15*l.* per fathom. All other points are without change.

WHEAL FORTUNE.—W. Knott, July 19: I beg to hand you the following report:—The ground in the end of the 40 cross-cut north is still traversed with branches of quartz and capel, interspersed with mundic, copper, and zinc, with traces of carbonate of iron and prian. In the 44, west of engine-shaft, the men have been driving by the side of the lode, which has not been taken down since last report. Bennett's eastern shaft, on the Wheal Brother's lode, is now down 11 fathoms below the 20 or adit level, and we have to-day discovered in the bottom of the shaft a branch of carbonate of iron 4 in. wide, interspersed with silver ore of moderate quality. We intend to continue the sinking of this shaft 9 or 12 ft. deeper, in order to open up further on this branch, before cutting plat, and driving east and west on the course of the lode. Samples of two parcels of silver ore have been sent to purchasers, soliciting orders for same.

WHEAL GEORGE.—C. Kneebone, July 21: We have penetrated the soft lode 4½ ft., disclosing a leader of gossan, with small cubes of soft lead 6 or 8 in. thick then 2 ft. of plumbago shale, and beyond this fossilised clay, fullers earth, &c.,

2 ft. thick; beyond this a little more lead makes its appearance, but we are not sufficiently advanced to say what it will turn out to be. The ground is favourable for progress, and for the production of ore.

WHEAL GRENVILLE.—T. Hodge, July 20: The 165 east end is worth 9*l.* per fathom. The winze below said level is suspended, the water being too much for manual labour, and the men are put to rise just over said winze on a lode worth 12*l.* per fathom. Vine's stope, in back of said level, is worth 14*l.* per fathom. Littlejohn's stope, in same level, is worth 16*l.* per fathom. The 150 east end looks more promising, and I think we are nearing a more productive lode. In the 150 north cross-cut there is no change worthy of note; we are still going through lode stuff. In the 140 east end the lode is worth 8*l.* per fathom. Angove's stope, in back of the 140, is worth 13*l.* per fathom. Carter's stope, in back of said level, is worth 14*l.* per fathom. The mine, on the whole, is looking better, and our returns will increase.

WHEAL JEWELL.—James Juleff, July 19: In the 70, east of engine-shaft the lode is large, composed of quartz, mundic, and stones of copper ore. In the 60 east we are driving south on the cross-course to intersect the lode to the east. We think it will take 2 fms. further driving to reach it, judging from the appearance of the lode in the 50: we have every confidence in meeting with a valuable lode at this point. In the 50 east of cross-course the ore part of the lode is 2 ft. wide, worth 3 tons of copper ore per fathom, with every appearance of further improving in value. No. 1 stope in back of the 50 is worth 2 tons of copper ore per fathom. No. 2 stope in back of the 50 is worth 2 tons of copper ore per fathom. The 40 east of flookan lode 2 ft. wide, composed of quartz, mundic, and stones of copper ore, looking very kindly. Rise above the 40, west of winze, lode producing 1½ ton of copper ore per fathom; this rise is opening out good stoping ground. We are making excellent progress in sinking the new shaft from surface. The water continues to increase in the 50 cross-cut north, towards the north lode.

WHEAL LUSKEY.—Wm. Skewis, July 20: We have cut a splendid looking lode containing gossan, quartz, green carbonate, red oxide, and grey copper ore. It is Phœnix and Caradon Mines over again, only on the north-eastern side of the granite, with a very large lode from 8 to 10 ft. wide where seen at surface, and I believe will be found equally large by the time we have cut through it in the adit level. Should the next 4 to 5 ft. prove to be as good as the past it will be a splendid discovery, and such as has not been made in East Cornwall for years. No man living can tell what the shares will be worth. We have an average of about 60 fms. of backs on this lode for about one mile in length, which can be worked without any machinery; and, should it prove to be as rich, as we have every reason to believe it will—it will be the grandest mine in this par t of the county.

WHEAL LUSKEY.—J. Gifford, July 21: In the adit level cross-cut the lode has been cut into 6 ft., where it is composed of capel quartz and rich stones of green carbonate and grey copper ore—a very promising lode.

WHEAL PEEVOR.—W. T. White, Thos. C. King, July 30: We cannot speak of any alteration in our points of operation since our last report sent out last week, in which we stated we hoped to be in a position on this report to give the value of the msddle lode cut in the 80 cross-cut; the lode is 4 ft. wide, and worth 15*l.* per fathom. We are now sinking with all speed the winze in the bottom of the 70 on this lode so as to effect communication as quickly as possible. We shall then lay open a good section of stoping ground that can be profitably worked. We know of no other change worthy of remark.

WHEAL RUSSELL.—John Gifford, John Bray, July 21: We are making good progress in sinking Stephens' engine-shaft, where the lode is from 3 to 4 ft. wide, stained with black and grey copper ore, with indications for an improvement. Last night we cut a little water, but not to hinder. The lode in the 55 east continues to look very promising, producing good saving work for copper ore. No improvement to report in the bottom level.

WHEAL UNY.—Henry Eddy, July 21: There is no material change since last week's report. The 160 west, which is now in a productive lode, is entirely in virgin ground, there being no level in the mine over or under it.

ARENDAL.—By the report received from these mines this week ships have been chartered to bring over a further 535 tons of copper ore, and the managers state—"We shall send full 400 tons per month as promised, although one month may appear a little less; but this owing to the chartering of the vessels. We cannot always depend on getting vessels to take the exact 400 tons per month, but at the end of the year you will find this quantity, and if possible, a little more." Skytmur Mine is looking very well, and improving. Boilstad shaft is down 8 fathoms below the 40, lode worth 3 tons per fathom, and the managers never saw it looking more promising for making large courses of copper ore than it is now.

BRATSBERG COPPER MINES.—Mr. Loam, the well-known Cornish engineer, has just returned from these mines, and gives a wonderful account of them. He expresses his astonishment at the great richness of the mines, and the large returns being made, though only 25 men are employed, while he values the ore ground opened at above 100,000*l.*, which is daily being added to. He considers the dressing machinery as perfect as any he ever saw, and capable of treating largely increased returns. He has given an estimate for boring machinery, which would enable immense profits to be realised in a short time. These remarks refer to only one of the several good mines belonging to the company. The statutory general meeting will be held next month.

SORTRIDGE.—The gossan (or copper) lode continues to improve, producing good stones of copper and mundic. The agent states that he has again examined the 30 fm. level from the engine shaft, which level he finds has been driven a considerable distance in a large lode, from which he has broken some very fine specimens of copper ore, and he expects to meet with a long run of valuable ore ground left standing by the side of the old workings, and which he believes will be of great value to the company. The agent also remarks, "The more I see of this mine the more strongly I am convinced that it will prove to be a large and profitable one, even for copper alone, and for which the company commenced their research. In addition to this, however, I find in course of operations that there is a large quantity of profitable tin ground available."

TANKERVILLE CONSOLS.—The new lode continues good in the 220, and if found as productive in the 206 and 192 cross-cuts, the managers say there will be a new mine here. At Pennerley, the shaft if draimed 37 fathoms, 4 ft. below the 80. They have began to drain the water out of the 80 winze, on Warm Water lode, where there is a good run of ore ground. Bog is drained to near the 70.

EAST ROMAN GRAVELS.—The new discovery at the 109 is still worth full 2 tons of lead ore per fathom, and they hope to meet with it soon in the 97.

DEVON FRIENDSHIP.—The company took possession of this property only about March last, and the returns up to the end of June amount to nearly 1800*l.*, all prodaced from the stuff at surface. The sales from this source will continue, and as the levels below adit are drained the total returns will be greatly increased. Valuable discoveries of rich copper ore are also likely to be made. There is still a fine lode in the adit end, worth full 6 tons of arsenical mundic per fathom. There is every prospect of this fine mine at least realising the confident expectation of Capt. Daw, who has had best of opportunities of being acquainted with its merits.

WHEAL HONY AND TRELAWNY UNITED SILVER-LEAD MINING COMPANY.—Since the commencement of the present month the works at this company's mines have progressed with very great rapidity, all the heavy parts of the 90-inch cylinder engine being erected. Several pairs or gangs of workmen are now engaged in erecting the lighter portions. The balance-bob is fixed, and the shears erecting, which, when completed, will admit of the dropping the main rods and heavy pumps in Smith's engine-shaft, all of which are prepared. The new lode (Brockelbank's), upon which an adit is being driven, is daily improving in size and character, and shows evidence of speedily yielding silver-lead ores. The gossan is of the strongest kind, intermixed with mundic. This is undoubtedly the finest lode ever seen in this locality at such a shallow depth. In the eastern part of the estate another most promising lode has been discovered, having a similar appearance and bearing, and means will be adopted to develope it forthwith.

GUNNISLAKE (Clitters).—The proposed division of the sett, and the north portion to be sold to a new company, was not agreed to; and with regard to the suggestion made at the recent four-monthly meeting, of working the mine as a Limited Liability Company, it was incidentally mentioned at the meeting on Wednesday that the committee had fully considered the matter, but found a large majority of the shareholders against any alteration in this respect.

WEST OF ENGLAND MANGANESE.—The managing director—Mr. T. Currie Gregory—has just returned from his second visit of inspection and reports that the works are progressing satisfactorily, the engine lately purchased is fixed in position and connected with the pumps, &c., and all has been started in good order. The cross-cut is 48 ft. long from shaft to lode gone down in the bottom of the shallow adit. The lode is 2½ ft. wide and all that could be desired in capeis and ore, and the mining captain, Capt. Doidge, expresses himself more certain than ever of success. Satisfactory arrangements have been made for rock-drill machinery.

Mr. Herbert G. Edlmann, of the firm of Joseph Edlmann, of New Broad-street, has joined the board of the Merchant Banking Company of London (Limited).

TO THE METAL TRADE.

FOR COPPER, TIN, LEAD, &c., apply to—
MESSRS. PELLY, BOYLE, AND CO.,
SWORN METAL BROKERS,
ALLHALLOWS CHAMBERS, LOMBARD STREET, LONDON.
(ESTABLISHED 1849.)

JOHN G EAST,
NEWCASTLE-ON-TYNE.
BROKER FOR THE SALE OF PIG-LEAD, LEAD ORES, COPPER ORE, COBALT, MANGANESE, CARBONATE OF BARYTES. ESTABLISHED 1866

HENRY NUTT AND CO.,
7, BRISTOL ROAD, BIRMINGHAM,
PURCHASERS OF
LEAD ASHES, LEAD SLAGS, SULPHATE OF LEAD, TIN ASHES, TERNE ASHES, AND ALL REFUSE CONTAINING TIN AND LEAD.

HENRY WIGGIN AND CO.
(LATE EVANS AND ASKIN),
NICKEL AND COBALT REFINERS
BIRMINGHAM.

The Mining Market: Prices of Metals, Ores, &c

METAL MARKET—LONDON, JULY 22, 1881.

IRON.	£	s.	d.	£	s.	d.
Pig, 3MB, f.o.b., Clyde...	2	7	6–		—	
,, Scotch, all No. 1 ...	2	8	0–	2	8	3
Bars, Welsh, f.o.b. Wales	5	5	0–		—	
,, ,, in London.	5	15	0–		—	
,, Stafford., ,,	6	15	0–		—	
,, in Tyne or Tees ...	5	7	6–	5	10	0
,, Swedish, London...	9	0	0–	9	10	0
Rails Welsh, at works ..	5	5	0–	5	7	6
Sheets, Staff., in London	8	0	0–	8	5	0
Plates, ship, in London .	7	2	6–	7	5	0
Hoops, Staff., ...	7	0	0–	7	5	0
Nail rods, Staff., in Lon.	6	0	0–	6	7	6
STEEL.						
English, spring	11	0	0–18		0	0
,, cast	30	0	0–40		0	0
Swedish, keg	15	0	0–		—	
,, fag. ham.	15	10	0–		—	
LEAD.						
English, pig, common...	14	5	0–14	15	0	
,, ,, L.B.	14	15	0–15		0	0
,, ,, W.B.	15	5	0–		—	
,, sheet and bar..	15	2	6–		—	
,, pipe	15	12	6–		—	
,, red	16	15	0–		—	
,, white	21	15	0–23	15	0	
,, patent shot ...	17	5	0–		—	
Spanish	14	0	0–		—	
NICKEL.						
Metal, per cwt.	15	0	0–16		0	0
Ore, 10 per cent. per ton.	20	0	0–25		0	0
QUICKSILVER.						
Flasks, 75lbs.,war.(nom)	6	10	0–		—	
SPELTER.						
Silesian	15	10	0–15	15	0	
English, Swansea	16	10	0–		—	
Sheet zinc.....	19	15	0–20		0	0

TIN.	£	s.	d.	£	s.	d
English, ingot, f.o.b...	95	0	0–	96	0	0
,, bars ,, ...	96	0	0–	97	0	0
,, refined.....	97	0	0–	98	0	0
Australian	89	15	0–	90	0	0
Banca .....nom.	—		–	—		—
Straits	89	15	0–	90	0	0
COPPER.						
Tough cake and ingot.	64	0	0–	65	0	0
Best selected	65	0	0–	66	0	0
Sheets and sheathing.	72	0	0–	73	0	0
Flat Bottoms	74	0	0–	75	0	0
Wallaroo	68	0	0–		—	
Burra, or P.C.C.....	65	10	0–		—	
Other brands	60	0	0–	63	0	0
Chili bars, g.o.b.	59	5	0–		—	
PHOSPHOR BRONZE.						
Alloys I., II., III., and IV. ...	£120	0	0			
,, VI. and VII.	135	0	0			
,, XI., Spi. bearing metal	112	0	0			
BRASS.						
Wire	6½d.–		—			
Tubes	9	–	—			
Sheets	8¾	–	—			
Yel. met. sheath. & sheets	6½d.–6½					
TIN-PLATES.*	per box.					
Charcoal, 1st quality ...	1	2	0–	1	4	0
,, 2nd quality ...	0	18	0–	1	0	0
Coke, 1st quality	0	18	0–	0	18	6
,, 2nd quality	0	16	0–	0	16	6
Black.....per ton	15	10	0–		—	
Canada, Staff. or Gla. at Liverpool	12	0	0–		—	
Black Taggers, 450 of 14 × 10	30	0	0–		—	

* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; IX 6s. per box more than IC quoted above, andadd 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—A further improvement has this week been perceptible in the tone of most branches of the metal trade, and in many instances prices are rather higher, and although the demand still remains somewhat quiet, yet increased vitality is expected to be shortly given, not only to the iron, but also to other trades, on account of the great development of railway construction in India and other countries, while satisfactory results are anticipated from the Bengal Railway, which reports show has been attended with striking success just lately. It may be argued that as dividends paid by many of the railway companies for the first six months of this year do not compare well with those realised for the corresponding period of last year, that this shows the probability of reduced trade requirements. But this, however, does not necessarily follow, for notwithstanding that it is a criterion that in the forepart of the year less actual business has been carried through, yet this in a measure is easily accounted for, owing to the traffic for almost half that time being greatly retarded, and in some cases entirely checked, by the cold and inclement weather which existed throughout January, February, and March. Therefore, too much importance should not be attached to the reduced dividends of some of the railways, especially as the prospects of a coming prosperity for the trade are not bad, but probably the reverse. Just now the hot weather, combined with it being the holiday season, may perhaps keep business dull, but the cheapness of money and other favourable features support the markets, and hence although the movements during the week have not been very markedy yet on the whole prices are higher, and the more favourable prospect of the ensuing harvest tends to increase confidence, and stimulates buying for investment.

It is not an uncommon opinion that it will require a succession of good harvests before any real and substantial improvement can be permanently established in the trade. This may be so, and as the chances of reaping a fairly good harvest this year are so far certainly very promising, the first step towards this great boon may not unlikely be attained, and in the hope of this result purchasers have not been slow to effect contracts, and as time progresses and the autumn season draws nearer, there will doubtless be a still greater desire to enter into fresh engagements, and more particularly so if statistics should show any marked symptoms of improvement, which in some instances does not appear improbable. Holders have for a long time past endeavoured to put the most rosy hue on things, but have for the most part been unsuccessful in enhancing prices; nevertheless present incidences would almost indicate that their patience may not have to be tried much longer, but they may be able to sell their present stocks at perhaps fairly remunerative prices.

COPPER.—This market remains fairly steady as regards price, the demand still continuing more or less limited. The bi-monthly returns of Chili produce show the stock in first and second hands in Liverpool and Swansea to have slightly increased, amounting on the 15th inst. to 30,860 tons, compared with 30,475 tons on the 30th ult., the deliveries during the first fortnight of this month having been 1607 tons, and the imports 1992 tons. Although these figures do not compare well, yet the imports for other descriptions during the same period have been 1420 tons, and the deliveries 1634 tons, which is more favourable, and which makes the total imports to be 171 tons over and above the deliveries. Yet, as we pointed out last week, the charters from Chili for the first fortnight of this month were light, being only 1100 tons, therefore no anxiety need exist on account of the slight increase in the public stock, especially if the deliveries are maintained, which will probably cause the total visible stock to show a decrease at the end of the month. Holders have not evinced any stronger desire to sell since the publication of these figures, but have rather held off the market, hence prices for the most part, although showing no particular change, have, nevertheless, assumed a hardening tendency. The deliveries compare well with those for the corresponding period of last year, consequently holders do not lose confidence in the stability of the market, as it shows that at least an average amount of regular business for this time of year is being carried through. The shipping trade remains slack, and it is unsatisfactory to have to record a falling off in the exports for the first six months of this year compared with the two previous years, amounting to but 28,787 tons, against 30,562 tons in 1880 and 31,215 tons in 1879. The total imports for that time are, however, very much below what they were for the similar period of 1880 and 1879, and chiefly to this cause must be attributed the sensible reduction which has been lately effected in the total stock.

IRON.—In manufactured there is hardly any change to record, and although the demand continues rather quiet yet sellers keep firm in their quotations, and in some cases in order to make business practicable buyers have been obliged to increase their limits. Tne firmness of manufacturers does not seem likely to encourage the shipping trade, for this branch of the trade has lately been very quiet, when at times prices were even below those now current, and if indentors have been unwilling to pay those prices which have recently been ruling it is hardly likely they will care to give out them at a rise of 2s. 6d. or 5s. per ton. In Scotch pigs improved prices have been realised, owing to the damping down of some of the furnaces. Not only in Scotland have some of the furnaces been put out of blast but also in Middlesborough, and although in neither place it is expected that the movement will be of permanent duration, for in Scotland they are said to have been merely blown out for repairs, and in Middlesborough, owing to the masters having got into trouble with their men about wages, and it is thought that the men will only keep out on strike temporarily, and that the furnaces will ere long be again relit. Nevertheless while they are kept down the production will necessarily be curtailed, and it is to be hoped that some favourable impression be it ever so little may be made upon the present enormous and unprecedently heavy public stocks in both Middlesborough and Glasgow.

A somewhat stronger tone has been prominent on the Glasgow warrant market this week, prices on the whole being fairly steady. On Monday there was no market, on account of that day being kept as a Glasgow holiday, but on Tuesday an animated tone was perceptible, and an extensive business reported at 47s. 5d. to 47s. 7d., buyers remaining at the close at the latter figure. On Wednesday, however, not quite so much disposition prevailed to effect contracts, and prices gave way slightly, the official quotation being 47s. 3d., while yesterday the market was steady at 47s. 4½d., and closes to-day at 47s. 6d. per ton. The foreign and coastwise shipments last week were 11,150 tons, against 10,478 tons for the corresponding time of last year, or an increase of 672 tons, and which makes the total shipments now for the whole of the year 300,259 tons, against 404,917 tons for the same period in 1880, and 275,438 tons in 1879. There have been five furnaces damped down, making a total now in blast of 115. The stock in Messrs. Connal and Co.'s stores last week was increased by only 390 tons, a smaller increase than has been made for many week's previous, and which makes the total stock 570,288 tons.

The imports of Middlesborough pig iron into Grangemouth last week were 3575 tons, against 1730 tons for the corresponding period of last year, or an increase of 1845 tons, and which makes a total increase for the whole of this year, compared with last, of 39,590 tons. The strike in the Middlesborough district has rather agitated the Cleveland market; but as 24 furnaces have thereby been damped down, sellers have been stronger in their quotations, although buyers have not been very ready to pay any advanced rates. Quotations for pigs are chiefly at about 37s. 6d. for No. 3, and 36s. 6d. for No. 4 forge. Warrants continue dull of sale, and are offering at about 38s. 6d. for No. 3. There is a further increase of 1337 tons in the public stock in this district, and which makes a total stock now in hand of 182,312 tons. There is but a quiet demand existing for manufactured, but quotations are still firm at 5*l.* 10s. to 5*l.* 12s. for bars, 5*l.* 10s. for angles, 6*l.* to 6*l.* 2s. 6d. for ship plates, and 1*l.* per ton more for boiler plates. From Wolverhampton a strong demand is said to continue for sheets, both for galvanised and plain, numerous enquiries having been received from Australia, the former having advanced 5s. in value, while black sheets are quoted at 7*l.* 15s. for singles, 8*l.* 10s. for doubles, and 10*l.* for latens. Marked bars are strong at 7*l.*, while some of the best houses are not selling under 7*l.* 10s.

With regard to pigs, prices keep firm for all-mine Staffordshire qualities at 62s. 6d. to 65s. A satisfactory business is reported on the Birmingham market, numerous orders having been placed for local consumption. A more cheerful feeling exists, and Quarter-day prices have been freely paid for both the raw and manufactured material. More business has been done for sharp delivery than for forward contracts, and as several specifications have been placed manufacturers have sufficient work to keep their mills actively engaged for the time being, and are hopeful that the trade will continue to develope. At Sheffield the trade is said to keep brisk, and many of the larger mills have extensive orders on hand. Ship and boiler plates are in brisk demand, and rails meet with a good enquiry. The American trade is reported without appreciable change, Eglinton is quoted 8½ lower, making the present quotation for No. 1 $20·50, while Cleveland pigs are a shade higher. No. 1 Gartsherrie is offering at $23, Glengarnoch at $22·50, and Coltness at $23·50. Scrap and old rails remain without alteration.

TIN.—There is no new feature of any importance to be reported as regard the state of this market; at times rather better prices have been realised than those ruling last week; but the market, however, does not close at its best. Business in foreign has chiefly been carried through at about 90*l.* for cash parcels, although a few lots have been sold at slightly under this quotation, but at the same time the Official List has occasionally quoted cash parcels at 5s. to 10s. above that figure. Fluctuations in this market are so frequent that a rise or fall of 10s. or 20s. at a time is not considered a matter of much importance, but the satisfactory statistical position of this metal has for some time past enabled bull operators to get the better of the market, for an upward progress has ultimately been effected in prices, adverse movements being mostly only of a temporary character; at the same time the present price, compared with other metals, is certainly a high one, and considering the general state of the metal trade, producers may congratulate themselves in being able to effect sales at such rates, the maintenance of prices being due more to the speculative than to the consumptive demand.

LEAD.—This market is firmly maintained, although no material change is to be reported in the state of the demand, which continues somewhat limited.

SPELTER.—Prices keep fairly steady, but transactions appear to be confined, for the most part, only to meet immediate requirements.

STEEL.—There is no change, some of the mills still keeping briskly occupied with orders in hand.

TIN-PLATES.—There is a better demand, and prices are rather higher. Advices from America are more favourable and report more extensive transactions than have lately been carried through.

QUICKSILVER is without change. Importers of Spanish quote 6*l.* 10s., and some second-hand lots have been sold at 6*l.* 7s. 6d.

TIN.—Mr. E. P. WHITE, New York (July 1), writes: The stock in all hands on June 1—New York, Boston, and Philadelphia—was 2065 tons, to which must be added the imports during June, Straits and Malacca into Boston, 50 tons; into New York, 415 tons; Australian into New York, 220 tons; L. and F. 25 tons = 710 tons; together 2775 tons. The consumption during June was 800 tons, leaving a total spot stock of 1975 tons; to which add—Straits and Malacca, May and June shipments per sail, 275 tons; April, May, and June, per steamers, 945 tons = 1220 tons, giving a total in all hands spot and afloat of 3195 tons. Immediately after publication of last circular the therein mentioned parcel of Malacca tin—about 400 tons, which had been the sport of our market for a fortnight—found buyers, at an average of about 19¾c., and from that moment the true position of tin was allowed to exercise its legitimate influence. Importers and dealers who had for over six months been content to supply the requirements of consumers at from ¼c. to 1c. per lb. below first cost, thereupon returned to the old-fashioned commercial principle of buying in the cheapest and selling in the dearest market, rapidly raised their prices from 19¾c. to 20¼c. Those, however, who had hesitated to replenish their exhausted stocks entered the market with spirit, and secured whatever was available, both on the spot and to arrive. The total transactions during the first fourteen days of June exceeded 1000 tons Straits and Malacca, of which about 600 tons were spot, at from 20c. up to 20¾c., and the balance to arrive, at from 20c. to 30¾c., delivered on dock. Those of our importers who based their operations in the East upon the favourable statistical position of the article, and recognised the late depression as purely artificial, were enabled to anticipate this revived demand at moderate prices; say, from $27 to $27¼ in Singapore; whereas, those who rushed after them were subjected to a considerable squeeze at the hands of John Chinaman, who was fully prepared to take advantage of the position, and latterly ran up his price to $29½. Our consumers and out-of-town dealers were more or less taken by surprise (notwithstanding repeated warnings), by this sudden advance; and, although the demand from them has been good, they have only bought for their daily requirements. Should this system be much longer continued, consumers will have themselves to blame, if they see prices running away from them.

The MINING SHARE MARKET has been particularly quiet this week; there is scarcely any business doing, and very few shares saleable. Thus, quotations are nominal, and not at all to be relied upon when shares are offered or forced for sale.

As a rule, July and August are the dullest months in the year, and now the great influx of gold and other new concerns have made things worse than usual.

TIN is firmer, but at present there is no advance in the standards for ore, and scarcely any business doing in shares. Blue Hills, 2¾ to 3; Carn Brea, 23 to 25; Cook's Kitchen, 16 to 16½. Dolcoaths have fallen to 64, 65. East Pools have advanced to 37, 38; at the meeting a dividend of 1*l.* per share is expected. East Blue Hills, 12s. 6d. to 15s. At North Pensruthal meeting a call of 6s. per share was made. New Trumpet, 2½ to 3.

South Frances. 14½ to 15; Tincroft, 16 to 16½; West Basset, 14 to 14½; West Frances, 14 to 15; West Peevor, 14 to 15; Wheal Sisters, 2 to 2½; West Phœnix, 1½ to 1¾; Wheal Agar, 14½ to 14¾; Wheal Basset, 4½ to 4¾; Wheal Jane, ½ to ¾; Wheal Jewell, ⅝ to ¾; Wheal Kitty (St. Agnes), 2 to 2½. Wheal Peevor have declined to 16, 17. West Kitty, 5 to 5½; the 72 end east is worth 20*l.* per fathom. The 60 east is worth 30*l.*, and the rise above the 60 fm. level 25*l.* per fm. West Polbreen, 1⅜ to 1⅝; New Kitty, 1½ to 1¾; Goodevere, 1⅛ to 1¼.

COPPER has been firmer, but very little business doing in shares. At the Cornish Ticketing on Tuursday the standerd advanced 30s. The average price of the ore sold realised 3*l.* 14s. for 7¼ per cent. produce. Bedford United, 1⅝ to 1¾; the sale here—80 tons—brought 252*l.* Devon Great Consols, 8½ to 9; the sale here 808 tons—realised 1536*l.* 16s. 6d. only; one parcel of 107 tons selling at 18s. per ton. Gunnislake (Clitters) have been inquired for, and leave off 3 to 3½; the sale here—396 tons—realised 2548*l.* 7s., or an average of nearly 6*l.* 10s. per ton.

South Caradon, 40 to 50; 410 tons here sold for 2307*l.* 7s. 6d., the best parcel, 10 tons, bringing 18*l.* 11s. per ton. Marke Valley, 1⅛ to 1⅜; the ore, 210 tons, brought 525*l.* 5s. 6d. East Crebor sold 67 tons for 195*l.* 19s. 6d. Sortridge Consols, 1⅛ to 1⅜; this mine seems to be turning out well, and the agents are very sanguine about having a great mine. Devon Friendship, 1 to 1¼; though possession of the mine was taken only about March last, the sales of arsenic and tin have amounted to end of June to nearly 1800*l.*, all from stuff at surface, and as the levels under adit are drained the returns are expected to increase largely. Prince of Wales, 12s. 6d. to 15s.; the 90 ends here are looking well. Parys Corporation, ⅝ to ¾; a strong feed of water has been cut in the 90 cross-cut south, and good stones of copper met with. Mona, 11 to 11½; Mona Consols, 1 to 1¼; Carnarvon Copper, 1 to 1¼; South Devon United, 1½ to 1⅝; Devon United, 1⅞ to 2; East Caradon, ⅝ to ¾; Mellanear, 4½ to 5; New West Caradon, 7s. 6d. to 10s.; New Cook's Kitchen, 6 to 6¼; West Caradon, 1 to 1¼; West Crebor, 7s. 6d. to 10s.; West Seton, 18 to 20; Wheal Crebor, 3½ to 4; Morfu Du, ⅜ to ⅝.

LEAD Mines are dull, with very little business doing in shares; quotations are merely nominal in most cases. Van, 8½ to 9; the sale of ores on Thursday realised 2265*l.* 10s.; the mine is looking very much better. Great Laxey, 17½ to 18½; Derwent, 1 to 1¼;

D'Eresby Mountain, 2 to 3; Roman Gravels, 11½ to 12½; the sale of ore, 100 tons, realised 930*l.*; and another 100 tons will be sampled next week; the 65 south in eastern portion of the lode is worth 6 tons per fathom, and a new winze will be commenced in it next week.

Tankerville Consols, 10s. to 12s. 6d.; the new rich vein still holds good in the 220, and if met with as productive in the 206 and 192 cross-cuts, as the agents expect, it may make a new mine. East Roman Gravels, 17s. 6d. to 22s. 6d.; the new discovery in the 109 continues worth full 2 tons of lead ore per fathom, and a cross-cut will be put out for it at the 90. North Herodsfoot, ½ to ¾; No. 2 stope continues worth 30 cwts. of lead ore per fathom, and should it continue the mine may do well. Coed-y-Fedw, 1 to 1¼; East Craven Moor ⅝ to ¾; East Van, 1 to 1¼; Frongoch, 3½ to 4; Goddard's Lead, 1 to 1½; Glenroy, ⅜ to ⅝; Great Holway, 5 to 5½; Herodsfoot, ⅝ to ¾; Leadhills, 2 to 2½; North D'Eresby, 1 to 1¼; Pen-yr-Orsedd, 1 to 1½; South Darren, 1⅜ to 1⅝; West Holway, 35s. to 40s. Great Holway, 5 to 5½; the company sold on Wednesday 25 tons of lead, at 11*l.* 2s. 6d. per ton. Another sampling will take place by the end of the month of 25 tons of lead and 40 tons of blende. Gwernymynydd Pref., 1 to 1½; Kirk Michael, 1 to 1¼; Bodidris, 15s. to 25s.

FOREIGN MINES.—Arendal, 2¾ to 3; the managers advise that ships are chartered to bring over 535 tons of copper ore, and state that 400 monthly will be sent for the year. Brazilian Gold, 1 to 1¼; Cape Copper, 42 to 44; Colorado, 2¼ to 2½; Don Pedro, ⅜ to ⅝; Emma, 2 to 2½; English Australian, ¾ to 1; Frontino and Bolivia, 3¾ to 4¼; Organos, 1⅜ to 1⅝; New Quebrada, 4¼ to 4½; Panulcillo, 5½ to 6¼; Richmond, 15¾ to 16¼; Ruby, 7 to 7¼; Birdseye Creek, 1¼ to ½; Canadian Copper and Sulphur, 1¼ to 1½; Colar, ½ to ⅝; Devala Central, ½ to 1¼; Devala Moyar, 1⅜ to 1⅝; Devala Provident, 1-16 to 3-16; Indian Glenrock, 1⅜ to 1⅝; Indian Phœnix, 1¼ to 1⅜; Indian Trevelyan, 1 to 1½; Indian Consolidated, par to ⅛ prem.; Mysore, 1¼ to 1½; Mysore Reef, ⅜ to ⅝; Ooregum, ⅝ to ¾; Rhodes Reef, ⅜ to ⅝; South-East Wynaad, 1¼ to 1⅜; South Indian, 1⅜ to 2; St. John del Rey, 215 to 225; Tambracherry, 1⅛ to 1⅜; Tharsis Sulphur and Copper, 42 to 43; Yuba River, 1 to 1⅛; Michipicoten, 1 to 1¼; Kapanga, ⅜ to ½.

The Market for Mine Shares on the Stock Exchange has fluctuated considerably during the week, but altogether the movement has been rather unfavourable, and at present sales are rather difficult to effect. This dulness may probably be attributed to the absence of detailed information from the Indian gold mines, and the tatal unreliability of that which is published, for it cannot be doubted that in sympathy with these many other shares move. In addition to this the marvellously fine weather has sent many away for their holidays, and it is well known that shareholders who press sales during holiday seasons not only sacrifice their interest but assist to depress prices—as a rule brokers, dealers, jobbers, and the public generally hold aloof from operating at such times. Metals generally appear somewhat stronger, yet ores are still fetching only a very low price. At the Cornish ticketing on Thursday, however, 10s. 2½d. per unit was paid for 7½ per cent. ore, which is also an improvement. It is anticipated that a period of renewed activity will succeed the dull season which seems now to have commenced.

Indian Gold Mine Shares have been much less freely dealt in, the incomprehensibility of the Indian Gold Mines Company telegrams and reports having much shaken the confidence of investors. The statement that the consulting engineer's criticism was added a day earlier than the alleged receipt of the report criticised—which is not considered to indicate straightforward business procedure—has led capitalists to ask where they are to look for protection if their own officers are so careless in guiding them. Certainly the intelligence department connected with Anglo-Indian gold mining is, to say the least, defective; and reflects much discredit upon both Indian and European officials. Shareholders are given good grounds for suspicion, and fear for their future prospects, so that reorganisation and accuracy should be attempted at once. The South Indian Gold Mining Company notify that they close on July 30 for the preparation of dividend warrants, and reopen on August 8. A highly gratifying letter has been received from Mr. R. Brough Smyth, the resident engineer of the Devala Moyar and Rhodes Reef Company, in which he states that all investigations tend to show he has understated the value of the reefs in the Wynaad, and these companies' properties are, in his opinion, of enormous value. The Gold Mining Trust Company notify that they have declared an interim dividend at the rate of 25 per cent. per annum. As scarcely anything has been heard of the concern since its formation much interest will be felt in the statutory meeting to be held on Tuesday, and at which probably some details will be obtainable as to the source of the profit. A correspondent suggests that the maxim "No Trust" should be in future ignored if a trust company can earn 25 per cent. profit whilst the Indian gold mines, in whose shares they deal, get nothing but ambiguous telegrams and misleading reports.

The Rio Malagon Sulphur-Copper and Silver Mines, with a capital of 200,000*l.*, in shares of 10*l.* each, has been formed to purchase for 50,000*l.* (of which 30,000*l.* is taken in cash, and 20,000*l.* in fully paid shares) 52 mining setts—known as Sierracilla and Manolita—in the Huelva district, Spain. The property is in the immediate neighbourhood of and on the same metalliferous belt as Mason and Barry's San Domingo, the Tharsis, and the Rio Tinto. The prospectus, which will be found in another column, mentions that it is well known this region is an extremely rich mineral country. The three great mines already mentioned have proved this incontestably, and the opening up of the Rio Malagon Mines will add another important property to the group. The ores from the mines of this company, in addition to the sulphur and copper products found therein, contain lead, zinc, and silver in considerable quantities, besides traces of gold, and consequently they are expected to realise considerably higher prices than those obtained for the products from either of the other mines. There is every facility for extraction of the ore, and an ample supply of water. The entire charges, including royalty, transport from the mines, and freight to Swansea, is estimated by Mr. Rickard, who has made careful enquiry on the spot, at only 2*l.* 6s. per ton, which would, assuming only the present low prices and the analysis above mentioned, leave a net profit of 2*l.* 4s. per ton on the whole quantity delivered to Messrs. Richards, Power, and Co., under the above-mentioned contract. The owners of adjacent mines are preparing to construct a railway to the River Guabiana, which would still further reduce the cost for carriage of the ore; and the projected Government railway from Huelva to Portugal passing close to the mines will afford even greater facilities of transport. It appears from Mr. Rickard's report that these mines which he considers one of the best properties in the Huelva district, were worked in ancient times by the Romans, as was the case with the Rio Tinto, the Tharsis, and the San Domingo mines, the old workings extending over a length of nearly three-quarters of a mile, having a width of from 6 to 54 ft., comparing favourably with those of the other mines in the province. Some pillars of ore left by the Romans when worked out gave several hundred tons of ore of the following composition:—Lead, 23 per cent.; zinc, 30 per cent.; copper, 4 per cent.; sulphur, 23 per cent.; silver, 10 ozs. per ton, besides a little gold. These mixed ores were formerly of little value, owing to the difficulty of separating the metals; this difficulty has now been entirely overcome, the result being that they will realise even at the present low price about 4*l.* 10s. per ton.

The North Wales Freehold Copper Mines and Smelting Company, with a capital of 250,000*l.*, in shares of 1*l.* each, has been formed to purchase for 100,000*l.* (of which 55,000*l.* is taken in fully-paid shares, and 45,000*l.* in cash) 20 acres of freehold mineral estates, including the Derwen Deg, Machernig, and Pannol Gwyn Copper and Lead Mines, in Carnarvonshire, which are stated in the prospectus (published in another column) to have been inspected in May by Prof. Andrew C. Ramsay, the Director-General of the Geological Survey of the United Kingdom, it being added that the Professor expresses a very favourable opinion as to the great value and mineral resources of the mines. But that it is disinctly asserted that the Andrew Ramsay referred to is indeed the person at the head of the Geological Survey it would have been naturally assumed that (as in the case of Cornwall Great Consols and the "Professor Owen," unknown to Professor Richard Owen, whom other people know) there are Ramsays and Ramsays. The brilliant prospects, however, of the enterprise cannot be questioned, for with Prof. Ramsay as consulting engineer and superintendent of the underground operations, work will be carried on under conditions which have not before been aspired to. Prof. Ramsay may be congratulated upon his new vocation, and the company may be even more highly coagrntulated upon the powerful aid they have secured in the support of the director of the Geological Survey of the United Kingdom. The undertaking is further noticed elsewhere.

The Queensland Land and Coal Company are inviting subscriptions at par for 120,000*l.* Seven per Cent. First Mortgage Debenture Bonds secured on the freehold lands, property, plant (including that to be purchased with the debenture capital now offered) and coal fields of the company, which are very favourably referred to in the report of the Government Geological Surveyor—Mr. A. C. Gregory, C.M.G.—to the Secretary for Mines; this report is annexed to the prospectus. The share capital of the company is 175,000*l.* in shares of 10*l.* each; of this 26,000*l.* has been issued in fully-paid shares as part payment for the property (the total purchase price is not named); 132,000*l.* has been set aside to be issued as fully-paid, and 17,000*l.* remains for issue at the discretion of the directors. The property consists of the Burrum River and Fraser Island Freehold Land Estates, covering an area of 1899 acres, and nearly seven-eights of the entire Burrum River Coalfields, estimated by Mr. Gregory to contain 10,000,000 tons of workable coal in the upper seams. The remainder of this field, comprising an area of about 200 acres, may be acquired by the company, one-third of it being now under offer for 4000*l.* The company's land on the main road from Maryborough to Bundaberg, consisting of 1739 acres (freehold) in the centre of a large sugar-producing district, with the Government railway terminus upon it, is well situated for township allotments. The collieries are at present worked under great disadvantages as regards transport, the coal having to be taken by a circuitous river route of 70 miles to market at Maryborough, the route being rendered very difficult by sandbanks. But the Queensland Parliament, acknowledging the importance of the coalfields, have voted 54,000*l.* for the construction of a railway from the company's property to the port and railway terminus of Maryborough, a distance of 18 miles, and the contract for construction is stated to have been already let. The company have acquired the freehold of four collieries which formerly belonged to separate owners, the land covering 1739 acres, and also 160 acres of well-timbered land on Fraser Island, part of which will be employed as a coaling station for the Queensland mail steamers and vessels bound eastwards. The issue of the debentures will leave the concern free from debt, and with all necessary plant and rolling stock provided and paid for. The prospectus will be found in another column.

Devon Great Consols, 8¾ to 9¼; the sale this week of copper ore, 808 tons, realised 1536*l.*, which is more than the previous month.

Devon Great United, 1¾ to 2; some important discovery is now shortly expected at these mines, as driving several ends has been commenced, and stoping of ore ground will be vigorously carried on, so that samplings of ore are shortly expected.

South Devon United, 1¾ to 1¾; the mines, as will be seen by the agents' report, are looking better, but there is a great scarcity of water for dressing operations owing to the very dry weather.

Kit Hill Great Consols, 17s. 6d. to 20s.; the tunnel driving is progressing, and the repairs to the engine on the top of Kit Hill are progressing, but not so quickly as could be desired owing, it is said, to the foundry people disappointing the supply of the necessary requirements.

Drake Walls United Mines shares have been in demand at 17s. 6d. to 20s., and it is reported that more water is coming out of the deep adit level. This fact, with the engine set to work this week, will enable the company to get out the water to the 70 fm. level very quickly, and make good returns of tin.

South Wheal Frances, 14½ to 15. As will be seen by the manager's report, the mines are looking exceedingly well, and it would appear that, under the new management, great vigour is being put forward, and the first month's sale of tin since the last meeting of shareholders has just been made, about 32 tons realising over 1700*l.*

West Basset, 14½ to 15. As will be seen in another column, an excellent report has been received from the agents. South Caradon, 45 to 50. The sale of copper on Thursday (much better than previous months by about 400*l.*) realised 2307*l.* West Seton, 20 to 21. Great expectations are entertained of these mines shortly being in a position to make increased returns.

East Chiverton, 1¾ to 2; with reference to this mine the secretary writes that it was stated in last week's Journaltthathe accounts for five months showed a debit balance of 1316*l.*, which is altogether incorrect. The whole of the 20 weeks' costs, including merchants' bills, and a half-year's minimum rent to Lady-day, and bankers' charges is but 1252*l.* 18s. 3d., from which must be deducted—50 tons of lead, sold at 13*l.* per ton, 650*l.*, and interest on overdue call, 1*l.* 2s. 6d., equal 651*l.* 12s. 6d., thus making the debit balance only 601*l.* 5s. 9d., while the liabilities of tho mine exceeded the assets by only 224*l.* 5s. 4d.

Wheal Lusky, ½ to ¾; an important discovery is announced in the agent's report for this week.

Flagstaff District, ⅝ to ¾; it is stated that a highly satisfactory telegram has been received from Prof. Vincent, in which he states that the mine is greatly improving, and that important ore discoveries have been made in three different levels. The engines, furnaees, air-compressors, and hoisting machinery have all been repaired and partly renewed. The cars have started running throughout the entire tramway.

California (Colorado), 1⅛ to 1¼; a telegram received to-day says: 300 tons of ore have been crushed during the week; the clean-up of the mill gives $2200, sent 100 tons of tailings to the smelters; mine would produce 100 tons daily with inereased machinery.

La Plata, 1 to 1¼; the telegram received from New York to-day states that the nett profit for June was $15,760 30c.= 3283*l.* 6s. 8d.

Ruby and Dunderberg, 6¾ to 7¼; the usual weekly telegram reports 241 tons smelted during the week—produce 40 tons bullion, value $13,000.; shipments, 239 tons The detailed mining reports advices the usual good work done on the Bullwhacker and Dunderberg Mines: the latter especially is developing large quantities of rich ore. No. 2 ore body, 8 ft. wide below the 600 ft. level, has already been developed, and gives signs of increased size. Another ore body at the end of the same level shows 5 ft. wide down from the 500 to below the 600. All the stopes were looking well, and the machinery and furnace working regularly. The advance in the price of lead at New York will greatly assist to the desired dividend, and it is reported that remittances to England have been resumed.

Missouri, 8 to 9; advices received this week, dated July 1, records the work done during June. In St. Clair Mine, in the 315 north, 29 fms. of ground were stoped, yielding 1 ton to the fathom. The stopes continue to run through clay, and present a strong course of ore. The 315 level north has been driven 8 ft.; the lode continues to average about 4 in. in width, carrving clay and plugs of mineral in the course throughout. The St. Clair shaft has been sunk 18 ft.; the lode continues 6 in. in width, with well defined walls. During the sinking this month some coarse heavy stones of lead ore have been found. The rock passed through has been softer than ever heretofore, and more congenial for the formation of ore than any ground we have yet had. Old engine-shaft has been sunk 8 ft. The bottom of this shaft presents a much better appearance than it has yet done. The lode split during our last sinking in December, but the lode has now come together between regular walls, and looks very promising for lead formation.

Michipicoten Copper, 1¼ to 1⅛; a telegram has been received that the main engine shaft, being sunk in the country rock 400 ft. from the lodes, is turning out good ore—supposed to be a new lode not hitherto known. The diamond drill is working well, and the boilers and heavy machinery have been landed on the island.

In lead mine shares there has been comparatively little doing, and prices have remained without material alteration, quotations being for the most part purely nominal. Great Laxey, 17½ to 18½; the quarterly dividend-cheque of 6s. per share, equal to 40 per cent. per annum, will be posted to-day. Mines looking better. Roman Gravels, 11¾ to 12½; the sale of lead ore realised this week 930*l.* The mines are looking well, the ends producing about 15 to 16 tons of lead ore per fathom, and are considered likely to improve. Tankerville Great Consols, ⅝ to ¾, and in demand; the agents' report the 220 east and west to be looking well, and cross-cuts are being put out at the 192 and 206 levels to interseet the new north lode, and should the lode turn out, the managers' say, as present appearances indicate, a new mine will be quickly laid open. At the Bog portion of this company's property the water is already pumped out below the 68, and at Pennerley portion of the mines the water is nearly out to the 120.

Pant-y-mwyn, 1⅞ to 2⅛; the 22 west of Modlyn is reported to be opening out a fine lode, with stones of lead and blende, and is daily expected to cut the first of the rich series of large runs of ore discovered at a distance of 175 fathoms.

In Diamond Mining companies' shares there is absolutely no market, and although the decision of the Judicial Committee of Privy Council in favour of the London and South African Exploration Company was attempted to be utilised to force up the shares with a view to their sale, the effort failed completely. For a day or two they were quoted higher—as much as 39*l.* for the 10*l.* share, with 8*l.* paid up, being at one time named—but they are now only called 38*l.* to 39*l.*, which, moreover, is quite nominal. The appeal case really did not affect either the Exploration nor the Hope Company to any material degree pecuniarily; but the dispute is nevertheless one which should be definitely settled in the interest of claim holders generally. What is wanted to give life to diamond mining is a better price for the stones, and an increased demand for them; at present they are practically unsaleable, even at an average of 30s. per carat all round, and many will not fetch 5s. per carat. This accounts for the fact that the Cape of Good Hope Diamond Mining Company, at the statutory meeting held during the week, announced a return of only 850*l.* worth of diamonds, although their operations are progressing satisfactorily. The entire South African diamond field does not exceed the size of a moderate English farm (a few hundred acres), yet has yielded diamonds which have reduced the market value 95 per cent. Further discoveries or more extensive working would make them as cheap as garnets; and it is the knowledge of this fact that has prevented the British capitalist from investing in diamond projects, and induced the Dutch Israelites of London, Amsterdam, and the Cape, and their friends, to use such strenuous efforts to dispose of their interests. Mr. Stransky's selling prices are:—Adamant, 30s. to 40s. prem.; African, 11*l.* to 12*l.*; Anglo-African, par; Cape of Good Hope (ordinary), 30s. to 40s. prem.; Central Dorstfontein (first issue), 48*l.* to 49*l.*; Central Jagersfontein, 1 to ½ dis.; Compagnie Française, 42*l.*; Fry's Gully, 12*l.* to 14*l.*; Gordon (first issue), 20*l.* to 21*l.*; Homestead, 16*l.* to 17*l.* prem.; Kimberley, 42*l.* to 43*l.*; Kohinoor, 45*l.* to 47*l.* 10s.; London and S. A Exploration Company, 390*l.* to 400*l.*; London Jagersfontein, 2*l.* 10s. to 3*l.*; North Block, par; Orion, 20s. to 25s. prem.; Victoria of de Beer. 24*l.* to 25*l.*

The Llay Hall Coal and Clay Works Company (Limited) invite subscriptions for 1000 10*l.* preference shares, with cumulative preferential 5 per cent. dividends, and participation in surplus profits. The property is described as one of the most extensive and valuable in North Wales, fully equipped, and developed with existing contracts of great importance.

The directors of the Railway Debenture Trust (Limited) have declared the usual interim dividend of 6 per cent. for the half-year ending July 15.

Telegraphic advice from the Australian Joint-Stock Bank, Sydney, has been received by the London branch intimating the declaration of a dividend and bonus for the half-year June 30 of 12½ per cent. per annum. 3030*l.* has been added to the reserve fund, which is thus increased to 180,000*l.*

The directors of the Buenos Ayres (New) Gas Company are inviting subscriptions at par for 70,000*l.* six per cent. debentures, being balance of a total authorised issue of 200,000*l.*, secured by mortgage to trustees in London of the entire property of the company The debentures are to bearer for 100*l.* and 50*l.* each, repayable in 1896, with interest coupons attached, payable in Loedon half-yearly, on Jan. 1 and July 1. The accounts of the company for 1880 showed a net profit of 23,540*l.* 10s. 3d. A dividend of 5 per cent. for that year was paid upon the share capital of the company, and 1168*l.* 18s. 8d. was placed to a renewal fund. Undivided profits amounting to 11,472*l.* 0s. 11d. (including previous balances), were carried forward to the current year. The business of the company is rapidly developing.

The estimated traffic receipts of the New York, Pennsylvania, and Ohio Railroad Company for June amount to $449,712, against the corrected actual earnings for the corresponding period last year of $368,456, showing an estimated increase of $81,256.

The Emigrant and Colonists' Aid Corporation notify that owing to the very severe depression in trade which has existed in New Zealand during the past year the sales of land have been inconsiderable, and the profit realised therefrom has been absorbed in the working expenses. Sufficient profits were, however, carried forward from the previous year to enable the directors to recommend the payment of a dividend at the rate of 10 per cent. per annum and to carry forward 3154*l.* 3s. 6d. to next year.

The revenue account of the Hull-street Tramways Company for the half-year ended June 30 shows, subject to audit, a balance sufficient to admit of a dividend at the rate of 3 per cent. per annum, as against the same rate for the corresponding half-year of 1880.

The accounts of the Tramways and General Works Company for the year ended June 30, as audited, show a balance at the credit of profit and loss account of 11,011, out of which, after placing 2000*l.* to the reserve fund, the directors recommend a dividend at the rate of 10 per cent. per annum, carrying forward 2511*l.*

At Truro Ticketing on Thursday, 2171 tons of ore, of 7¼ average produce, and containing 157 tons 4 cwts. of fine copper, were sold for 8035*l.* 6s. 0d., being 3*l.* 14s. per ton of ore; 10s. 2½d. per unit, or 51*l.* 2s. 4d. per ton of fine copper in the ore, and an average standard of 89*l.* 2s. Subjoined are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
July 7.	893 ...	£90 9 0	6¼	£3 7 6	9s. 11½d....	£49 16 2
" 21.	2171 ...	89 2 0	7¼	3 14 0	10 2½ ...	51 2 4

Compared with the last sale, the advance has been in the standard 1*l.* 10s.: and in the price per ton of ore about 2s.

CAPPER PASS AND SON, BRISTOL,
ARE BUYERS OF
LEAD ASHES SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c and DROSS or ORES containing COPPER, LEAD, AND ANTIMONY.

GEO. G. BLACKWELL,
CHAPEL STREET, LIVERPOOL,
HANDLES ON PURCHASE OR SALE
MANGANESE, ARSENIC, FLUOR-SPAR, WOLFRAM, BLENDE, CALAMINE, CARBONATE and SULPHATE OF BARYTES, ANTIMONY ORE, CHROME ORE, MAGNESITE, EMERY STONE, PUMICE STONE OCHRES AND UMBERS, CHINA CLAY, LEAD ORE FOR POTTERS, TALC, PHOSPHATE OF LIME, &c. Also, ORES CONTAINING LEAD, ZINC, AND SILVER, IN COMBINATION.

EDGAR JACKSON
(Associate Royal School Mines),
ANALYST AND ASSAYER,
Assays or Complete Analyses made of Copper, Silver, Lead, Zinc, Tin, and other Ores. ASSAYING TAUGHT.
106, QUEEN VICTORIA STREET, LONDON, E.C

TO CAPITALISTS.—TEN THOUSAND £1 Shares in a GOLD MINE are OFFERED BY PRIVATE TREATY, in which 10 per cent. dividend is guaranteed for the present year—50 per cent. bonus will be given if taken immediately. Payments, 37 monthly.
Address, "C., 131." Deacon's Advertising Offices, Leadenhall-street, E.C.

MINES SHARES.—I am a BUYER of FIVE HUNDRED TAMAR and ONE HUNDRED VAN LEAD MINE SHARES. Seller please state lowest prices. I am a SELLER of the following. No reasonable offer refused for Tin Hills, South Darren, Organos Gold, Herodsfoot, East Craven Moor, East Botallack, Wheal Jane, and Grey's Brewery shares.
Address, ALEX. J. DAVIDSON, care of Messrs. Deacon, 154, Leadenhall-street, London, E.C.

MR. W. B. COBB, STOCK AND SHARE DEALER
29, BISHOPSGATE-STREET, LONDON, E.C.
Certain Gold Shares strongly recommended for a great rise. Full particulars on application.
Special Business in New Trumpet Consols, West Lisburne, Bwlch, Columbian Gold, Indian Trevelyan, New Zealand Kapanga, Wheal Coates, and Richmond.
My Circular for June is now ready, and may be had on application.
BANKERS: ALLIANCE BANK (Limited).

ABBOTT & CO.,
SWORN BROKERS,
9, CORNHILL,
LONDON, E.C.,
OPPOSITE THE BANK.
Just Published—Special Edition.
JULY LIST OF INVESTMENT
Post free on application.
The Best Information.
Silver Hill Mine—the best Mine this year.
The Best of the Tin Mines of Cornwall.

FOR SALE, the WHOLE or PART:—

50 Bwlch United, £2.	100 Old Shepherds, 5s. paid, 2s. 6d.	120 Almada and Tirito, 6s.
100 West Lisburne, £1 5s.	100 La Plata, £1 5s.	300 Hungarian Cop., £1 paid, 14s.
70 Wheal Coates United, £1 5s.	50 Wheal Elizabeth Tin, £1.	50 Mona.
100 Sentein, 11s.	100 Van and Glyn Amalgamated, 6s. 6d.	100 Ooregum, 16s.
120 Pierrefitte, 11s.	50 ditto, pref. 14s. 6d.	100 South Indian Gold, £2.
60 Tankerville Consols, 12s. 6d.	100 East Blue Hills, 11s.	100 Wheal Sisters, £1⅝.
50 East Roman Gravels, 15s.	250 West Caradon, £1.	100 Wheal Jewell, 14s.
125 South Devon United, £2.	300 New West Caradon, 10s.	100 West Phœnix, £1½.
40 West Kitty, £5.	300 East Crebor, 6s.	100 Okel Tor, £1 5s.
50 Tin Hill, 22s. 6d.	300 West Devon, 15s.	100 New Zealand Kapanga 7s. 6d.
120 Mounts Bay, 5s. paid, 2s. 6d.	150 West Crebor, 9s.	10 New Cook's Kitchen, £6⅜.

H.W. has also FOR SALE, and which he can specially recommend for investment as also for the rise in price, £750 Ruby and Dunderberg, 10 per cent. mortgage debentures. Dividends payable half-yearly (June and December), with option of conversion into ordinary shares at par until June, 1882.
Bankers—London and Provincial.
Address, H. WILKINS, 1, Tamworth Villas, Tottenham.
N.B.—Advice given as to what to buy, sell, and avoid from personal and practical knowledge of the Cornish, Welsh, Irish, and Isle of Man mines. Parties investing in Welsh mines will do well to consult H. W. before concluding purchases.

C. T. REEVES AND CO.,
(ESTABLISHED 1872.)
STOCKBROKERS,
19, WALBROOK, LONDON, E.C.
INVESTMENTS IN STOCKS AND SHARES.
Purchases and Sales of Home, Foreign, and Colonial Stocks and Shares made at the closest market prices either for cash or the fortnightly settlement.
LOANS.
Advances made on Stocks, Shares, and other negociable Securities at equitable rates of interest.
Speculative accounts opened on favourable terms.
Special Business in Gold Mining Shares.
C. T. R. and Co.'s Monthly Price List and Report on the Stock Markets sent post free on application.

JOSEPH TOMS, STOCK AND SHARE DEALER,
No. 88, BISHOPSGATE STREET WITHIN, E.C.,
Can SELL the following SHARES at prices affixed:—

50 Pioneer, 28s. 3d.	50 East Lovell.	50 South Tolcarne, offer wanted.
50 Mysore Reef (fully paid), 12s. 9d.	100 East Rose (5s. paid), offer wanted.	100 Tin Hill.
5 Richmond, £15⅞.	50 Old Shepherds, offer wanted.	50 New Trumpet, £2½.

New Trumpet Consols shares should be purchased at once for a great rise. Valuable discoveries have been made.

PENNINGTON AND CO., SWORN BROKERS,
3, ROYAL EXCHANGE BUILDINGS, E.C.,
Transact business in every description of Stocks and Shares.
ESTABLISHED 1869.—BANKERS: ALLIANCE.

TREVINCE CONSOLS MINE.	We have still a few shares left at £1 2s. 6d., which ought to be secured at once, as the mine is daily improving, and they must have a big rise very shortly.

SPECIAL BUSINESS in Devonport and Tiverton and Grey's Breweries, New Gold Run, Gold Coast, Dingley Dell, and Dieu-Donne shares.

A FREEHOLD INVESTMENT—NO ROYALTIES.

A dividend at the minimum rate of 20 per cent. per annum is guaranteed by the Vendor during the first year of the company's working, secured to the satisfaction of the Directors by deposit and investment of £30,000.

55,000 Shares of the present issue have been taken by the Vendor in part discharge of purchase money (this being the extreme limit to which the rules of the Stock Exchange allow the Vendor to become a Shareholder).

40,000 Shares have been already privately applied for, leaving a residue of 70,000 Shares, which are now offered to the public at par. The remaining capital will not be issued under the Company's Articles, except at a premium of not less than £1 per share.

Quarterly dividends will be declared, the first payable within four months after the Mines and Works are taken over.

Interest at the rate of 5 per cent. per annum will be allowed to all Shareholders on amounts paid in advance of calls.

The North Wales Freehold Copper Mines & Smelting Co.

(LIMITED.)

INCORPORATED UNDER THE COMPANIES' ACTS, 1862 TO 1880, WHICH STRICTLY LIMIT THE LIABILITY OF EACH SHAREHOLDER TO THE FIXED AMOUNT OF HIS SHARE.

CAPITAL £250,000, IN 250,000 SHARES OF £1 EACH.

PRESENT ISSUE, 165,000 SHARES AT PAR.

2s. 6d. on application, 2s. 6d. on allotment, 5s. one month after allotment, and the balance as required, but with an interval of not less than three months between each call.

DIRECTORS.

General DAVID DOWNING, Plaxtol, Sevenoaks, Kent.
R. MAXWELL FABRIS, Esq., Merchant, 16, Gresham Street, London.
* HENRY H. FANSHAWE, Esq., East Dulwich, Surrey, and Carlton Club.
Sir HENRY V. GOOLD, Bart., Croydon, Surrey.
HENRY GIELGUD, Esq., Merchant, 65, Gracechurch Street, London.

* Will join the Board after allotment.—With power to add to their number.

CONSULTING ENGINEERS—JAMES NANCARROW, Esq.—MARTIN BOUNDY, Esq.
BANKERS—Messrs. BARNETTS, HOARES, HANBURYS, and LLOYD, 60, Lombard Street, London, E.C.
SOLICITORS—Messrs. WILKINS, BLYTH, and FANSHAWE, 10, St. Swithin's Lane, London, E.C.
AUDITORS—Messrs. CHAS. FITCH KEMP, FORD, and CO., 8, Walbrook, London, E.C.
BROKERS—GEORGE F. DAVENPORT, Esq., 7, Draper's Gardens, Throgmorton Street, London, E.C., and London Stock Exchange.
Messrs. BLACK and ROBSON, 14, Princes Square, Glasgow, and Glasgow Stock Exchange.
SECRETARY—Mr. LEWIS J. SEYMOUR.

REGISTERED OFFICE—BARTHOLOMEW HOUSE, BANK OF ENGLAND.

PROSPECTUS.

OBJECTS OF THE COMPANY.

This company has been established for the purpose of acquiring and working the freehold mineral estates, including valuable copper and lead mines, known as Derwen Deg, Machernig, and Pannol Gwyn, in Carnarvonshire, North Wales. They are in active working order, and situate on the main road, about a mile and a half from the town of Conway, and close to the Isle of Anglesey, in which are the celebrated Mona Mine and the Pary's Mountain.

UPWARDS OF £40,000 ALREADY EXPENDED. PRESENT BUSINESS.

Upwards of £40,000 has been already expended upon these mines, which extend under some 20 acres, and the result of this expenditure, which has been most judiciously made, under the advice of the most skilled mining engineers of the day, is that the mines have been thoroughly opened out, are absolutely free from water, in excellent working order, and sending ores to market. The company in purchasing them thus secures a business which gives an immediate return for the capital invested.

The machinery at the mines (which are within easy access from London, Manchester, or Liverpool, and are open to the inspection of intending shareholders) is more than sufficient for the present business, and a large extension of it. It is impossible within the limits of this prospectus to give a full detail, but the directors would mention, as giving an idea of its amplitude—Four hoisting and pumping engines, being each of 14 horse-power, besides two portable engines of 10 horse-power, and a Selden's steam pump; boilers, steam winches, steam air compressers, and also water-wheel and buddles; three rock drills, patent stone breakers, patent pulverisers, jiggers, and crushers, with a great quantity of general plant and mining appliances.

The market value of the ores, and the prices fetched, appear from the reports. The sales have been made at the smelting works of the Marquis of Anglesey, at Amllwch, and at Swansea and St. Helen's. The freights are very light. The ores so sold are certified to have given in some cases as much as 30 per cent. produce, and realised upwards of £16 per ton. The average produce for the United Kingdom is only 10 per cent.

OUTPUT.—COST OF LABOUR AND DRESSING.—PROFIT, EXCLUSIVE OF THAT ON GOLD AND SILVER.

The output from those mines, only employing 200 men, with the usual machinery and appliances will, it is estimated, when working at the 60 fathom level, be 1200 tons per month; the inclusive cost of labour and of dressing the ore for the market (estimated at about £3 per ton), leaves a profit, assuming an average price of only £11 instead of £16 per ton, of £8 per ton, equal to £96,000 per annum. This estimate omits from view altogether the profits on the sale of gold and silver and the working of the lead lodes.

RICHNESS OF THE ORE.—PROFESSOR RAMSAY'S OPINION.—OPINIONS OF MINING ENGINEERS.

It will be noticed from the subjoined reports that the lodes are true fissure veins, bearing fine yellow and brilliant "peacock" copper, and that the ores are a very rich sulphuret, becoming more rich and widening out the deeper they go down.

The directors think it right to mention that they have his authority for stating that Professor Andrew C. Ramsay, the Director-General of the Geological Survey of the United Kingdom, has made a recent visit to these mines. The Professor, it appears, examined the outcrop of the main lode, which was found running nearly north and south, and of great width. He had selected and set apart for the Museum of Geology specimens of the copper ore then being raised from the numerous workings, which were visited after ascertaining the position of the veins of ore appearing on the surface. These veins extended at the bottom to the full width of the level; not less than 6 ft. from the footwall of the lode, the hanging-wall of the same not having been reached. This hanging-wall is some 46 ft. east He next visited what is known as the No. 1 sump, and here also found the veins of ore seen on surface and in the adit level; but again much richer and more massive. A number of blasts were made in this sump under the Professor's direction and in his presence, and on each occasion the quartz matrix was found richly charged with copper pyrites. Portions of the ore so obtained were taken away by the Professor for the collection at the Royal School of Mines, in Jermyn-street, where they have since been inspected by practical mineralogists; they speak highly of their value, and confirm the statement that they largely exceed, in fine copper, the average of the United Kingdom. He then inspected the deeper parts of the mine, the workings being still upon the veins of ore which had been seen on the surface, but which now filled up the entire level. A number of test blasts were again made, extending over the whole of the ground at this point, with the same satisfactory results. The Professor expresses, it may be added, a very favourable opinion as to the great value and mineral resources of these mines. His inspection took place in the month of May last.

In addition to this entirely independent testimony, the following gentlemen have, at different stages of the development of the mines, inspected and reported upon them. In each case the report was highly favourable. (The reports can be seen at the company's offices):—Messieurs James Nancarrow, Martin Boundy, Charles Paynter, Robert Morris, Walter Eddy, John Lean, John Howans, John Roberts, and T. J. Evans.

FEATURES OF THIS UNDERTAKING.

The two important features of this undertaking, which make it almost unique in the history of British mining, are—

Firstly.—The property is absolutely freehold; and, as the company pays no royalty, and they are their own landlords, the shareholders do not run the risk of some day finding their property forfeited for non-payment of covenants.

Secondly.—All the work of prospecting, boring, and the other expensive labour of searching for the lodes, has been already performed; the whole estate has been tested in every part, and found to be absolutely impregnated with minerals and mineral substances, while the position of each lode has been clearly ascertained, as will be seen from the accompanying map or plan.

The purchase includes the cottages and the workshops on the estate, together with the valuable and expensive machinery already mentioned, engines, boilers, boring machines, and apparatus for dressing and reducing the ores, with ample plant and stores.

SITUATION OF MINES.—NATURAL ADVANTAGES.—LABOUR CHEAP AND ABUNDANT.

The mines themselves are well placed for convenience and economy in working. They are situate on a gentle incline, perfectly free from overhanging ground, whilst at the same time possessing an ample water supply. The surface and bed rock are not hard, and the piercing is found to be comparatively easy. The surroundings road are good. There are no difficult gradients in the descent to the town of Conway. From Conway the ore is conveyed direct to the smelting works either at Amllwch, at Swansea, or at St. Helen's (where there are a large number of such works), and it has a ready and immediate sale at high prices. It should be mentioned that there is not only a good railway station at Conway, but also a shipping port to any part of the kingdom.

The mines also enjoy the advantage of being in a neighbourhood where labour is exceptionally cheap and abundant. It is a matter of notoriety that the Welsh miner is content with far less wages than his brethren in Cornwall or Devon, or any other of the great mining centres; while the close proximity of the port of Conway to Liverpool gives the command of a large amount of Irish labour.

LARGE FIELD FOR OPERATIONS IN SMELTING.

There is a large field for the company's operations later on, should it be determined by the shareholders to erect smelting and concentration works, in order to obtain the full amount of the gold and silver which is met with in unusually large quantities in the ores raised in these mines, and so avoid the great waste and loss of profit involved in the system which at present prevails throughout the country. According to the results given by even the present defective system the silver per ton of ore is upwards of 33 ozs., and the gold upwards of 10 dwts. These figures have been arrived at after careful assays of the ores, and are vouched for by Messrs. Johnson and Son, the assayers to the Bank of England and Her Majesty's Mint It is scarcely necessary to point out the large additional source of income which thus presents itself in the sale of the precious metals, apart from the ordinary sales of the copper ore. It is now known that, by a recently discovered process, the gold and silver can be easily and simply extracted.

There are valuable lodes of lead on the property. These lodes have been opened up and can be worked at a profit; but the main present business of the company is the working and sale of the very rich copper ores.

ARRANGEMENTS FOR SECURING SKILL AND ECONOMY IN WORKING.

The directors, who are not unversed in mining operations, are fully alive to the importance of securing skill and economy in the management and working of mines, whatever may be their intrinsic merits, and however large may be the profits derived from them. They purpose, therefore, entering into arrangements with a skilled mining engineer of large experience, under which that gentleman will devote his whole time and services to the affairs of the company, receiving as part of his salary a limited commission on the amount of realised profits.

FACTS IN SUPPORT OF ESTIMATES OF PROFIT.

In order to show that the estimates of profits above given are very much within the facts of the case, the results are referred to of independent assays and tests applied in the one case by the manager at the Marquis of Anglesey's Smelting Works, and in the other by Messrs. Johnson and Son. The manager of the Marquis's smelting works states that he was much struck with the ore even at first sight, and that although an assayer of 30 years' standing, he never but once before met with a sulphuret that gave so high a percentage for copper, and that the quality of the copper itself was as good as a smelter could wish to have. The view of the superior quality of the ore is shared by all the practical mining engineers and men versed in the values of these ores, who have inspected the mines, and is expressed in the reports above referred to. They agree in the opinion that this sulphuret, when separated from its gangue, gives a produce of some 30 per cent. of fine copper. The average of the three kingdoms, as already stated, does not exceed 10 per cent., whilst that of the Cornwall and Devon is not over 7 per cent. of fine copper. This opinion is also practically confirmed by the results of the sales made. Besides the ordinary demand for ores of this description, there is always a great request for them among copper ore buyers and smelters for the purpose of mixing with the poorer ores. Smelters give preference to them over any raised in the United Kingdom, and they command the highest market price. Offers have already been made by smelters of known standing and responsibility totake the entire output of the mines.

According to the reports of Mr. James Nancarrow, and other mining engineers of eminence, and if regard is to be had to the opinion of the President of the Royal School, these mines are practically inexhaustible. As a matter of fact (which is the best means of testing what must always upon estimates contain more or less of theory) it is beyond dispute that the mines already mentioned, the Mona and Pary's Mountain, have paid to their shareholders, in one case, upwards of £4,000,000 sterling, and in another £3,000,000 sterling in the shape of profits from the sale of similar ores.

The directors are anxious not to appear unduly sanguine in their estimate of the profits which will be divisible, but would mention that upon the present capital the figures already given show a profit from the business of from 50 to 55 per cent. per annum. This is more than justified by the experience of the past in the case of other copper mines in this country, including the Devon Great Consols, the shares of which, under similar circumstances, with £1 paid, have been sold for £800 each.

RESERVE FUND—QUARTERLY DIVIDENDS.

It has been the habit in these mining operations for the managing body to accumulate profits sometimes for a period of upwards of 12 months before paying dividends. It is proposed in the present case, as the company will have the benefit of the sales of the ores and consequent profits immediately it takes possession of the mines, to give the shareholders the advantage of a speedy division of the profits, and for that purpose, as there are no royalties or rent to be paid, to declare quarterly dividends; after making provision for the reserve fund under the articles. The first dividend will be declared and paid within four months after the company has commenced its operations. A dividend of 20 per cent. as a minimum during the first year is guaranteed by the vendor, and will be secured to the satisfaction of the directors before the completion of the purchase under the terms of the existing contracts.

TERMS OF PURCHASE.

By the terms of the purchase the vendor, who is the promoter, and by whom they have been fixed, takes in part discharge 55,000 shares in the company, and in cash the sum of £45,000; £30,000 being retained by the directors, and invested under the provisions in the company's Articles of Association as a security for the fulfilment of the guarantee. There will be no preliminary, promotion, or other legal expenses, except brokerage and the ordinary and proper legal expenses attending the formation and registration of the company; which have been fixed at 1¾ per cent. on the registered capital of the company. The following agreements have been entered into:—Two dated respectively the 30th April and the 21st May, 1881, between Walter A. Bradley of the one part, and Henry H. Fanshawe of the other part, and one dated the 21st July, 1881, between the said Henry H. Fanshawe of the one part, and a trustee for the company of the other part.

These agreements and the Memorandum and Articles of Association can be seen at the solicitors' offices.

REPORTS, MAPS, PLANS, AND SAMPLES OF ORE TO BE SEEN AT COMPANY'S OFFICE.

The reports, of which extracts are given, with the maps of the estate, and plans of the mining setts, can be seen at the offices of company. Several tons of ore, taken indiscriminately from the mines, will also be on view during the time the subscription list is open.

CLOSING OF THE LIST.

The subscription for shares will be closed for London on Friday, the 29th of July, and for the country on Saturday, the 30th of July, 1881. In the event of the capital being over subscribed, the directors pledge themselves to allot, *pro rata*, so as to ensure an equitable division among applicants.

Prospectuses may be obtained at the company's offices, and application for shares may be made on the form annexed to the prospectus, accompanied by a deposit of 2s. 6d. per share, and may be left either with the bankers of the company, or with the Secretary, at the company's office. Applications may also be made, accompanied by a cheque or post-office order for the deposit, by registered letter, addressed to the bankers, or to the company at their offices.

In the event of no allotment being made to any applicant, the full amount of his deposit will be returned to him, on production of the banker's receipt.

Application will be made to the committee of the Stock Exchange for a special settling day an official quotation of the company's shares.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt; it then forms an accumulating useful work of reference.

PUBLIC COMPANIES LAW.—Will some correspondent state what rights, under the Companies Acts of 1862-80, are enjoyed by members and not enjoyed by the executors and administrators of deceased members?—R. G.

Received.—"C. H."—"G. M."—"J. G. E." (Newcastle-on-Tyne)—"G. J. N." (Richmond)—"L. T."—"J. R. T." (Birmingham)—"Old Reader" (Newport)—"C. M."—"Shareholder" (East Rose)—"H. J. F." (Cardiff)—"Y. Z."—"Shareholder" (Kapanga)—"S. D."—"Practical Miner" (Treburgett)—"R. F." (Glasgow): we publish all the information we can obtain in the Journal. "An Adventurer" (Durham).

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, JULY 23, 1881.

MINING TECHNICAL EDUCATION.

Mining is undoubtedly the most important of all our industries, and the one attended with the most danger, yet the State has done nothing whatever to educate those likely to be connected with it in a scientific manner. On the Continent, and in America, there are training schools of science and art supported by the different Governments, all of whom appear desirous of overtaking England as the great manufacturing producer for the world, and it is for that purpose that technical training establishments have been formed in the leading mining and trade centres. Just now, however, a step forward is being made by our Educational Department, the London Guilds, as well as by wealthy private individuals, to place England, so far as scientific education is concerned, on a closer level with other countries. Some years ago Mr. SAMUELSON, M.P., visited several of the continental schools and gave an interesting account of them, and the Educational Department, we are told, have invited that gentleman with Mr. SLAGG, M.P., to visit the Continent and report upon the working of the technical training schools in France, Belgium, Germany, Holland, and other countries. In those States there are mining schools where the education in all branches is of the most complete character, strong inducements being held out to the students to ensure proficiency in all branches of mechanical and chemical science which now play such an important part in connection with mining operations.

Much has yet to be learnt with respect to the economical and safe working of mines, and this can only be obtained by study, and that under the most scientific masters. We shall, therefore, look forward with interest to the report of Messrs. SAMUELSON and SLAGG, which we think cannot fail to be productive of much good. At the Yorkshire College, at Leeds, mining and geology—which should always go together—are now being taught by practical and scientific men, and it is gratifying to find that the number of students continues to increase. Mr. LUPTON is an experienced mining engineer, and Mr. GREEN, who has long been connected with the Government Survey, is one of our most accomplished geologists, so that the Leeds school holds out the strongest possible inducements for obtaining a thorough knowledge of practical and scientific mining and engineering, and that in a locality where the instruction of the teacher is supplemented by visits to mines and interesting geological localities. The Drapers' Company, London, has lately contributed 100*l.*, to be continued yearly, in aid of the Professor of Mines, whilst the local mineowners have subscribed most liberally towards the same object. The College, which is affiliated to the Victoria University, has already done much good, and may be looked upon as one of the most important educational institutions in the North of England. A new building is about to be erected at a cost of 35,000*l.*, towards which upwards of 24,000*l.* has already been subscribed. At Newcastle, in connection with the STEPHENSON centenary, a scientific educational establishment is about to be established, in which mining will be one of the leading elements, as it should be, seeing that the renowned "GEORDIE" was a genuine miner.

Although somewhat late as it may appear to many persons, the City Guilds of London have come forward in founding an establishment in the Metropolis for the promotion of technical education, the foundation stone of which was laid on Monday last by the Prince of WALES. The Institute is situate in the Exhibition-road, South Kensington, between the Indian Museum and the Albert Hall. The remarks made by the Prince of WALES on the occasion are of more than ordinary interest, showing that he is well acquainted with what has been done abroad in the shape of scientific teaching, and our own shortcomings in the same direction. He said—"Other nations which did not possess in such great abundance as Great Britain coal, the source of power, and iron, the essence of strength, compensated for the want of raw material by the technical education of their working classes, and this country has, therefore, seen manufactures springing up everywhere, guided by the trained intelligence thus created. Both in Europe and America technical colleges for teaching not the practice but the principles of science and art involved in particular industries have been organised in all the leading centres of industry. England is now thoroughly aware of the necessity for supplementing her educational institutes by colleges of a like nature." Though somewhat late, we are gratified to find that the views we have for years past so strongly urged with respect to technical education in connection with our mining and manufacturing industries are now in a fair way of being realised, as they must tend to the increased prosperity of the country, so that we shall maintain our proud position as the manufacturing and commercial centre of the world.

THE COAL PRODUCTION OF THE WORLD.

Some calculations of very considerable interest were made by the President of the British Iron and Steel Institute at its recent meeting in London. The calculations of the President referred to the progress made in the production of coal throughout the world during the eleven years ending with the year 1880. The statistics collected do not appear to us to be exactly complete, as they make no allusion to the quantity of coal raised in British India, Australia, Borneo, New Zealand, Canada, and other miscellaneous quarters, but notwithstanding all such shortcomings as these the data made available are of very considerable value. Thus, the President stated that while in 1869 Great Britain produced 107,506,683 tons of coal the corresponding production in 1880 had been carried to 147,000,000 tons. At this rate the production has been increased nearly 40 per cent. in this country during the last 11 years, and as the extraction of British coal was very considerable in 1869 the increase of 40 per cent. means in this case a good deal. In 1869 the United States raised 28,100,000 tons of coal. In 1880 the corresponding coal production of America had been carried to 63,500,000 tons, showing an increase of 35,400,000 tons. This increase is somewhat less than that established in Great Britain in the same period, but still the coal production of the United States will be seen to be developing at a more rapid relative rate than that of this country. Germany raised 26,774,000 tons of coal in 1869 and 42,161,000 tons in 1880. The increase in German coal production during the last 11 years will be seen to have been something under 16,000,000 tons, but although this was a much smaller increase than that noted in the United States the percentage augmentation as compared with 1869 is considerably higher. France, which for many years past has been making a great flourish about developing her coal mining industry, produced 13,509,000 tons of coal in 1869, and in 1880 she had carried her production to 18,857,000 tons, showing an increase during the 11 years of 5,348,000 tons, or about 40 per cent. The extraction of coal in Belgium has very little increased of late years, she having raised 12,943,000 tons in 1869 and 14,000,000 tons in 1880. Great Britain, the United States, France, and Belgium are the only countries in the world which produce coal upon a really important scale, still we may note that Austria carried her coal production from 4,500,000 tons in 1869 to 6,000,000 tons in 1880; Russia from 538,000 tons to 2,200,000 tons; and Spain from 550,000 tons to 750,000 tons. Altogether the countries to which the President's statistics referred increased their actual production from 194,070,670 tons in 1869 to 294,468,000 tons in 1880.

The salient fact which results from these comparative statistics is that the production of coal in the pricipal countries of the world increased during the last eleven years to the extent of about 100,000,000 tons. To this increase, Great Britain contributed, as we have already shown, about 40,000,000 tons, leaving 60,000,000 tons to be made up by other countries. The most important fact which appears to us to be established by the statistics is the earnestness and vigour with which the Americans are applying themselves to the extraction of coal. Although the coal production of the United States is very considerably below that of Great Britain, it begins to attain an imposing aggregate, and it occupies a much better second place than it did eleven years since. This growth in the coal production of the United States is probably the result of the great extension and improvement of the American railroad system, of the progress of American population, and the accumulation of American capital. It would seem to indicate also that American manufacturing industry has very greatly increased in importance during the last eleven years, as there must be an increased demand for coal to support and justify to increased production. The increase in the production of coal in Germany is also not without significance, and it would appear as if the increase of German coal mining has a tendency to exert a somewhat depressing influence upon the corresponding industry of Belgium.

OUR RAILS IN THE UNITED STATES.

It is satisfactory to find that the demand for our rails has not by any means died out in the United States. It has not fully regained its old elasticity, still it is both remarkable and encouraging to find that we sent the Americans 31,963 tons of railway iron in June, as compared with 34,215 tons in June, 1880, and 4834 tons in June, 1879. For the first half of this year the aggregate figures are excellent, amounting, as they do, to 159,309 tons, against 128,088 tons in the first half of 1880, and 7738 tons in the first half of 1879. It is true that in the "good old times," before American metallurgical industry acquired its present development, and before means of communication in the United States were as perfect as they have since become, we used to send the Americans as much as 500,000 tons of railway iron in a single year. Still to those who can remember that during the last few years this branch of our exports declined almost to zero, the rally to upwards of 300,000 tons, which appears likely to be witnessed this year, can but seem highly extraordinary.

There is little doubt that some change is impending in the commercial condition of the United States. The harvest of the American Republic is less liberal in 1881 than it was in 1880, and the European demand for the surplus wheat of the United States will be less urgent this year than it was twelve months since. This is calculated to diminish the prosperity of the great American railroads to some extent, but still they have acquired a solid credit by reason of greatly improved management of late years, and this credit will not be very easily shaken. Not only has the structural and traffic management of American railroads been improved recently, but the introduction of steel rails has had a decided tendency to economise working expenses, while loans on bonds can now be obtained without difficulty at 4½ or 5 per cent. per annum, instead of the 6 per cent. or 7 per cent. per annum previously paid. In presence of such comparatively favourable conditions as these it is not very probable that the duplication and improvement of the more important trunk lines of the United States will be arrested all at once, just because the American wheat crop of 1881 is not likely to yield such large profits as those which resulted from the unprecedented crop of 1880.

These, we believe, are the opinions of Mr. JAY GOULD. We do not draw our inspiration blindly from Mr. JAY GOULD, and we do not approve all his past proceedings. Still it would be idle to deny that he is a skilful and experienced American financier, and that no man in the United States has better means of forming a correct judgment as to the course likely to be taken by American commercial and financial affairs. We think that the American demand for our railway iron is not by any means exhausted at present, and the receipt this week of orders for 30,000 tons of steel rails for the Central Pacific Railroad appears to support our conclusion. There are certain points, such as San Francisco or New Orleans, at which English steel or iron rails can still compete advantageously with the corresponding products of American rolling mills.

SOUTH WEST BOARD OF MINING EXAMINERS, NEWPORT.

By and under the authority of the Home Secretary, the annual examination of candidates for certificate of competency as Colliery Managers, as specified in the Mines Regulation Act, 1872, was held in the Albert Hall, Newport, on the 12th, 13th, and 14th inst. The examiners were—Messrs. W. Needham, M.E., Newport; C. A. Harrison, M.E., Fishponds, Bristol; J. T. Thomas, M.E., Coleford. At 11 a.m. on Tuesday, the 12th, applicants were required to produce their license or authorisation from the Secretary of State as per 29th section of the Act, and also their respective testimonials as to their age, moral character, experience, and aptitude for their profession as colliery managers. Nine persons entered the list, but owing to some oversight on the part of the Home Office the examiners were obliged to cancel one party, although a working collier of 20 years experience, and for the last seven years engaged as foreman in rather an extensive local colliery. The examiners at once dispatched a telegram of enquiry to the Home Office, and 4 p.m. received a reply that the usual fee of 2*l.* had been paid on the 6th, and that the Home Office authorisation would be duly forwarded the applicant next post—conclusive proof that even the Home Office "can forget." Every effort was made to find the disappointed candidate so that he could proceed with his papers the following morning. He turned up on the morrow at 9 a.m., but was so upset by being thus deprived of his privilege to enter the list on equal terms with the other candidates that the examiners were satisfied it would be useless to recommend the attempt, consequently he retired with an expressive but sorrowful countenance. The first course includes a series of questions arranged in the following order. Each subject forms a separate paper, and must be closed within the time announced on the day's programme, thus—

On Tuesday, July 12, from 2·30 p.m. to 5·30 p.m.

	No. of questions.		Maximum degree of merit.
1st subject—Arithmetic	8	.....	95 marks.
2nd subject—Surveying and Geology	8	.....	110 "
On Wednesday, July 13, from 9·30 to 4 p.m.			
3rd subject—Ventilation	10	.....	150 "
4th subject—Practical mining	10	.....	150 "
5th subject—Engineering	7	.....	95 "

On the whole there are 43 questions. Each question having a maximum, intermediate, and minimum number, as 15, 10, 5, the lowest standard of merit being 300 out of a possible 600.

Having completed their papers the candidates who have scored 300 marks and are tolerably well up on No. 3 and No. 4 subjects are entitled to their final or *viva voce* test; but notwithstanding the 300 or more marks it is very possible he may thoroughly break down on some important question relative to the competency and obligations of a colliery manager. The *viva voce* ordeal depends in a great measure upon the kind of answer given to the several questions contained in their papers, with further interrogations on the nature and properties of gasses found in mines, and the mode of dealing with them; on pressure and temperature, and the distribution of air currents so as to produce the best effect from the motive power employed; on the way and manner of exploring fiery mines with safety-lamps, and the effects produced within the gauze cylinder when a dangerous accumulation of gas (CO_4) is present; on boiler explosions and the expansive force of steam under various degrees of pressure, &c.

This final stage was concluded on Thursday at 2 p.m., and on Friday at 12 o'clock a general meeting of the South-west Board to receive the report of the examiners was held at the Albert Hall. Present—Messrs. W. B. Naish, Bath, Chairman; E. J. Grice, Newport, Vice-Chairman; Wm. Needham, M.E., Newport; C. A. Harrison, M.E., Bristol; J. T. Thomas, M.E., Coleford; Wm. Burchall, Beaufort; J. Jones, Ebbw Vale; D. Williams, Rhymney; also Mr. R. Donald Bain, assistant inspector for the south-western district.

After the ordinary minutes had been read and confirmed, the examination papers, with list of the successful candidates, was placed before the board, and it was unanimously agreed that the following gentlemen were entitled to their certificate of competency as colliery managers from the Secretary of State:—

Jacob Sparks, Kingswood, Bristol	525 marks.
Edwd. J. Jones, Blackwood	445 "
W. J. Dunford, Barnsley, Yorkshire	370 "
Jno. Williams, Aberdovey	350 "
Morgan W. Davies, Neath	343 "

The board were much surprised to find there had been no advertisement of the time and place of examination inserted in the local papers as per resolution paper at the Bristol meeting on March 10, and attribute the small number of applicants to this neglect. It appears the Home Office undertake this responsibility, and for some obscure motive had totally disregarded the recommendation of the board, thus causing great disappointment to several in the south-west district who fully intended presenting themselves this turn. Mr. R. D. Bain, in reply to the Chairman and others, said it gave him great pleasure to state that Mr. Thomas Cadman was convalescent and that day on duty.

Mr. J. Jones being appointed by the Ebbw Vale Steel, Iron, and Coal Company mine manager of their Pontypool Collieries, ceases to be a member of the board. A cordial cheer of congratulation was expressed towards Mr. Jones; and Mr. Steadman, Ebbw Vale, was nominated in his stead.

It was decided to hold the next board meeting at the Guildhall, Bristol, on September 13, and with a complimentary vote of thanks to the Chairman the proceedings terminated.

ANNUAL EXAMINATION FOR MINE MANAGERS' CERTIFICATES.—The annual examination under the Coal Mines Regulation Act of candidates for Government certificates as managers of mines commenced at Darlington on Monday. Candidates attended from different parts of the district, which represents Durham, North Yorkshire, Westmoreland, and a few from more distant districts. There were altogether more than 30 candidates. Mr. Thomas Bell, of Durham, the Government Inspector, attended; and the examiners in attendance were Mr. John Daglish, Marsden; Mr. A. L. Steavenson, Durham; and Mr. John Formar, President of the Durham Miners' Association; with the secretary, Mr. G. W. Bartlett. The subjects of the examination comprised the practice and theory of the ventilation of mines, mine working, a knowledge of the Acts of Parliament bearing on mining, engineering, &c. The result of the examinations will not be made known for some little time.

IRON AND STEEL INSTITUTE.—The first portion of the Transactions of this Institute for 1881 has just been issued, and contains in addition to the report of the general meeting on May 4, at which the retiring president—Mr. Edward Williams—presented the Bessemer Medal to Mr. William Menelaus, of Dowlais, and the incoming president delivered his inaugural address, the papers on Casperson's converter ladle; on the relative corrosion of iron and steel, by Mr. W. Parker; on the economical advantages of steel shipbuilding, by Mr. W. Denny; on the manufacture of steel and steel-plates in Russia, by Mr. Sergius Kern; on experiments made to determine certain physical properties of cast-iron, by Mr. Charles Markham; on iron and steel permanent way, by Mr. Price Williams; on the manufacture of Bessemer steel and steel rails in the United States, by Capt. W. R. Jones; on hydraulic machinery for steelworks, by Mr. Michael Scott; on the preservation and ornamentation of iron and steel surfaces, by Mr. G. Bower, of St. Neots; on iron and carbonic oxide in iron and steel, by Mr. John Parry; on a new method for the determination of oxygen in iron and steel, by Mr. A. E. Tucker; together with the discussion which followed the reading of the several papers. The Notes on the Iron and Steel Industries of the United Kingdom in 1881 and the Report on the Progress of the Iron and Steel Industries in Foreign Countries, both by the general secretary—Mr. J. S. Jeans—are admirable compilations, and contain an enormous amount of information compressed into a small space. The volume is published by Messrs. E. and F. N. Spon, of Charing Cross.

THE CLEVELAND STEEL TRADE.—There is now more definite information respecting the immediate development of the steel trade in Middlesborough to replace the somewhat inflated reports sent out some three months ago. The Erimus Works start a few days hence with two Bessemer converters, on hematite in the meantime, but with the express intention of working Cleveland ore subsequently. They will turn out 700 tons per week. A company, to be called the North-Eastern Steel Company, is being organised, and amongst the promoters are Mr. Thos. Wrightson, J.P., Mr. S. G. Thomas, Mr. Percy Gilchrist, and Mr. Benton. The capital is to be 200,000*l.* The works are to be on the Middlesborough marshes, and will comprise four Bessemer converters for working the new basic process.

VALUABLE FREEHOLD MINING PROPERTY.—An advertisement will be found in another column in which is offered for sale, by Messrs. Hancock, Sharp, and Hales, an extensive property in one of the richest mining districts in the kingdom, the peculiarity of which is that the minerals will be held as FREEHOLD, and consequently no royalty will be payable on the returns, a burden so justly complained of by shareholders in mines. Besides this, the owners will be under no restrictive conditions as to working, and be subject to no penalties for breaches of covenant, &c., and will possess the ownership of the minerals in perpetuity. When we add that the neighbouring and adjoining mines have yielded large profits for centuries, and that many of these lodes pass through the lands offered, some idea may be formed of the value of the latter.

THE SEAHAM COLLIERY EXPLOSION.—Mr. Wright, in his report as to the explosion which occurred at the Seaham Colliery in September, says there are no sufficient grounds for forming a decided opinion as to the origin and place of the disaster. He adds, however, that the inquiry has been by no means barren of result:—"Professor Abel's experiments and reasoning have given a greatly increased importance to the questions already stated and illustrated by Mr. Galloway, Mr. Frere Marreco, Mr. Lindsay Wood, and other gentlemen with respect to the dangers of coal dust; and it is to be hoped that further attention will be given to this subject. Further, the Seaham disaster adds another warning to those emphatically given by previous explosions but stilll disregarded, on two points of the highest importance in colliery management. If the view of the proprietors as to the place of origin of the explosion is correct, this disaster is another instance following that of the Risca explosion, of the extreme unsafety of the Clanny lamp—the Davy is less safe—in a rapid ventilation when gas is present. If the other view is correct this disaster is another instance of the urgent necessity for prohibiting the firing of shots when any large numbers of men are underground."

THE VENTILATION OF MINES—A COLLIERY PROPRIETOR FINED. At the Chorley Petty Sessions, on Monday, Mr. Thomas Whittle, proprietor of the Farnworth House Colliery, Duxbury, near Chorley, was summoned under the Mines Regulation Act for not providing adequate ventilation. Mr. C. Holden prosecuted on behalf of Mr. Dickinson, Her Majesty's Inspector of Mines, and Mr. Wilson defended. Mr. Martin, Assistant-Inspector, visited the Farnworth House Colliery on June 16, and on examining the report book noticed that the presence of gas had been reported daily for about a month. He went underground to the place where the gas was stated to be, and found it was at the explosive point. He went to a lower level, and also found gas there, and on the down brow he found a man at work. He asked the fireman if there were no means of forcing the air in the places to remove the gas, and was told there were not. In the level, hearing a bubbling, he put his lamp horizontally on the floor, and gas

fired in it. The fireman told him he had tried the place in the fall, for gas, in the morning, and had not found any, and he (the fireman) considered there was ventilation sufficient. A shot was fired within about 30 yards off where the gas was; but the fireman thought there was no danger. Mr. Martin stated that he pointed out the presence of gas both to the fireman and to the underlooker. He thought the gas might easily have been removed with more ventilation. The defendant was further summoned under the 29th general rule, which provides that a competent person shall periodically make a true report of the state of the machinery, &c., of the colliery. The Inspector found the report untrue. For the first offence a fine of 10*l.* and costs was inflicted, and for the second a fine of 5*l.* and costs. The proceedings were taken for the prevention of accidents—no accident having happened.

KIANDRA GOLD MINING COMPANY.

In last week's Journal reference was made to the announcement and good prospects of this company, and it will now be seen by the advertisement in another column that the list of applications closes on Monday next. It would have been strange indeed if, after reading the various authentic reports on this gold field, the investing public had not taken kindly to it. Some of the reports having been made for the Government of New South Wales, and others by the first mining and civil engineers in Australia, more than the usual authenticity can be relied upon.

Another correepondent writes: This gold field has for the past 17 years been proved to be very rich by actual working. During all that time the water supply (without which the gold cannot be got) has only been available from six to twelve weeks in the year. The country has now been properly surveyed, and a scheme proved practicable for bringing water from the Tumut river to supply Kiandra all the year round. This effected, no machinery is required, only some hose nozzles for washing away the soil quickly. The statements in the prospectus are borne out by reports from the following well known colonial authorities—viz.: Lamon Young, Esq., geological surveyor; Messrs. H. B. Sullivan, mining surveyor, appointed by the New South Wales Government; Phillip Davies, M.E.; Fred B. Gipps, C. and M.E.; and P. Smith, mining registrar.

Mr. Phillip Davies, who is one of the first mining authorities in Australia, writes of the mines to be purchased by this company in these words: "These mines will yield more profit than any two mines I ever saw. One hundred years' work on an extensive scale could not exhaust the resources of the land that would fall into the hands of a company that would purchase these mines and the water-rights attached thereto. In my opinion there is no risk attached to this speculation; it is a certainty, and it is very rarely that one is justified in holding such an opinion in regard to gold mining." The annual rent is normal, about 1*l.* per acre, and there is no royalty to pay. In addition to the rich alluvial, to which hitherto reference only has been made, there are numerous auriferous quartz reefs, one of which gave a return of 6 ounces of gold per ton of stone. Another large reef gave an average of 19 dwts. per ton. The genleman who gives this information adds: "I believe a better average is made here than upon any other gold field in the colony."

THE GOLD FIELDS OF NOVA SCOTIA.

In the Transactions of the Institute of Natural Science the Rev. Dr. Honeyman, Professor of Geology and Palæontology, Dalhousie College, Halifax, gives an interesting paper on the geology of the Gay's river gold field, wherein he says:—"I would adduce another argument in confirmation of the opinion that the formation in question is Lower Silurian. Being persuaded of the correctness of the opinion expressed, I took occasion in the month of February, 1861, when advocating the establishment of a geological survey of the province before a committee of the House of Assembly, to quote from Murchison's 'Siluria' the confidently expressed opinion that the metaphoric Lower Silurian was the formation in which gold was chiefly in workable quantities. Assuming that this was the geological character of the Nova Scotia rocks under consideration, I argued from the discovery of gold at Tangier that a proper examination might prove these rocks to be extensively auriferous. The discovery of gold the second time at another locality in Tangier, the numerous discoveries made in rapid succession of auriferous deposits in other localities, and the productiveness of these gold fields, show that the inference was a legitimate one. These results corresponding so strikingly with Sir Roderick Murchison's observations may, therefore, be adopted as a *vice versa* argument in establishing the age of the geological formation in question. The aid of palæontology is much desiderated for the purpose of a conclusive decision of the question."

Since the preceding was communicated to the Institute Professor Honeyman has devoted considerable attention to the geology of the Nova Scotian gold fields, especially to the question of their age. He considers that his later investigations in the geology of Kings, Annapolis, Digby and Yarmouth counties have thrown considerable palæontological light on the subject. His paper "On the Geology of the Counties of Digby and Yarmouth," read before the Institute in its recent session, which is now in the press, and intended as the first of a series "On the Geology of the Gold Fields," gives the latest results of these investigations bearing on the age of the gold fields. These are considered as demonstrating that the age of the rocks containing the gold is Cambrian, while the time of the metamorphism and insertion of the gold-bearing veins in the rocks is post-Cambrian or Lower Silurian. He read a paper before the Institute in session 1878-9, giving reasons for the same conclusion.

THE MINERALS OF NEWFOUNDLAND AND NOVA SCOTIA.

The able report of the director of the Geological Survey of Newfoundland—Mr. ALEX. MURRAY—will tend materially to encourage the development of the mineral resources of the Province, and it is beyond question that the issue of the geological map of the whole island will amply repay the community for the outlay incurred; indeed, so obvious is this that the Halifax Mining Review—the best mining newspaper in the maritime provinces—very properly suggests that Nova Scotia should do something in the same direction—that the result of a systematic geological survey should be issued in a series of volumes as cheap as the common immigration blue books, and thus attract capital which whilst remunerating those supplying it would afford employment for the Nova Scotian working classes. It is pointed out that the easily accessible mining leads of Nova Scotia are closely allied to those of Newfoundland, and that the whole of the eastern shore of Nova Scotia is within reach of civilisation, supplies, and labour.

The ores of copper, says Mr. Murray, have been found in all the older formations in Newfoundland, from the Laurentian gneiss at the base to the carboniferous series at the summit, the qualities of which vary greatly with the age and condition of the rocks with which they are associated. Thus, in the Laurentian series, the rich ores of variegated and sometimes gray sulphides of copper are more frequent than any other, and for the most part in white quartz veins intersecting the strata; but while the ores have in many cases been found on analysis to yield at the rate of from 50 to 70 per cent. of metal, the quantities that are available at any one place hitherto tested have never yet been found sufficiently abundant to warrant an outlay of capital on the working of a mine. In the series corresponding to the Huronian of Canada very rich ores of copper are likewise well known at many parts chiefly in white quartz veins; several attempts at development have been made, but with limited prospects of success. Although the presence of copper is frequently indicated by stains of green carbonate and small nests of yellow sulphuret in the lower Primordial strata, Mr. Murray is not aware of any instances where the ores occur in mass, or in intersecting veins or lodes, except it may be close to their intermediate junction with the older series, on which they repose unconformably, or butt up against the faults. Galena, in calcareous veins, is of frequent occurrence in these Lower Silurian rocks; but, except in small isolated crystals or patches, the ores of copper are particularly rare, and in no case such as to be considered economically valuable.

But the cupriferous formations proper of Newfoundland, according to my views of the structure, are unconformably above all the former, and consist mainly of a set of metamorphic and igneous rock, corresponding exactly, in mineral character and condition, with the rocks of the Eastern Townships of Canada—described by Sir William Logan as the Quebec Group. He is aware that these views, as regards the structure, are at variance with those of several distingushed Canadian geologists, but his observations have led him to the conclusion that the stratigraphical position of this metamorphic group belongs to an horizon intermediate between the Calciferous and Hudson River group, probably chiefly of Chazy age; this corresponds with Sir W. E. Logan's views. The group consists of chloritic, dioritic, and felsite slates, interstratified with compact diorite, bands of red jasper, dolomites, great masses of serpentine or serpentinous rock, and volcanic products. In nearly all these rocks the ores of copper are more or less disseminated; but it is among the schistose portions, especially the chlorite slates, that they seem to be most abundant, and it is in rocks of that quality chiefly where the principal mining operations have hitherto been conducted.

THE ELECTRIC LIGHT AT WIMBLEDON.

Amongst the after-gun-fire attractions at Wimbledon during the National Rifle Association meeting was the very successful display of the electric light in the encampment of the London Scottish Rifle Volunteers. The system employed is that recently introduced by the Royatt and Fyfe Light Company of Queen Victoria-street, and known as the Pilsen system (Piette and Krizik's patent). There are four electric lights placed in the encampment, one at the top of the flag-staff about 80 feet high, a naked light, and the staff being erected on the hill top the lamp sensibly illuminates the whole camp, and is visible for many miles around. Another lamp is placed over the stag's head at the entrance to the mess tent, being enclosed in an opaline globe, and the remaining two, also enclosed in opaline globes, are fixed to posts at an elevation of 25 ft. on either side of the parade. The Dynamo machine (Schuckert's Patent) is driven by a portable 5-horse power nominal Clayton and Shuttleworth engine, fixed close to the cook's shed, the engine emitting little or no smoke, the attacking wires being run round on the turf surface. The whole system has been arranged and fitted up by Mr. Henry F. Joel, the company's engineer. The lamps having been fixed in the afternoon at night served to illuminate the open air concert given by the members of the corps. The concert was attended by Lord and Lady Brownlow, Lord Tweeddale, and the other distinguished visitors at the cottage, their entry into the camp being the signal for the lighting up for the first time, the effect being exceedingly good, the lights bursting out in an instant with great brilliancy.

The construction of the lamp is remarkably simple and very ingenious. There are two coils one above the other fixed to a tube, the top coils being wound with thick wire, whilst the bottom coil is wound with fine wire and forms a shunt to the electric arc; passing down through the centre of these two coils is a double coned iron core, thick in the centre and tapering off at each end; one carbon is attached to the bottom of this iron core, whilst the other is fixed to the bottom of the lamp. A most interesting feature of this lamp is the action of this iron core. In a position of this core between the two coils the action upon the core is the same, and as the core is set to strike the arc in proportion to the electric current so it always maintains the arc in the same proportions. The light under favourable circumstances has been absolutely steady. We shall give further details in the course of a few weeks.

THE LORDS' DUES QUESTION SETTLED.

The formation of the NORTH WALES FREEHOLD COPPER MINES AND SMELTING COMPANY, for the purpose of acquiring and working the freehold mineral estates, including valuable copper and lead mines, known as Derwen Deg, Machernig and Pannol Gwyn, in Carnarvonshire, North Wales, effectually settles the lords' dues difficulty, since there will, of course, be no mine lord to deal with. It will be seen from the prospectus that the property is in active working order, and that upwards of 40,000*l.* has been already expended upon these mines, which extend under some 20 acres; and the result of this expenditure, which has been most judiciously made, under the advice of the most skilled mining engineers of the day, is that the mines have been thoroughly opened out, are absolutely free from water, in excellent working order, and sending ores to market. The company in purchasing them thus secures a business which gives an immediate return for the capital invested. The machinery at the mines (which are within easy access from London, Manchester, or Liverpool, and are open to the inspection of intending shareholders) is more than sufficient for the present business, and a large extension of it. The output from these mines, only employing 200 men, with the usual machinery and appliances, will, it is estimated, when working at the 60 fathom level, be 1200 tons per month; the inclusive cost of labour and of dressing the ore for the market (estimated at about 3*l.* per ton), leaves a profit, assuming an average price of only 11*l.* instead of 16*l.* per ton, of 8*l.* per ton, equal to 96,000*l.* per annum. This estimate omits from view altogether the profits on the sale of the gold and silver and the working of the lead lodes.

But by far the most attractive feature in the prospectus is the assertion that Professor Ramsay has identified himself with the promotion of the concern. The directors mention that they have his authority for stating that Professor Andrew C. Ramsay, the Director-General of the Geological Survey of the United Kingdom, has made a recent visit to these mines. The Professor, it appears, examined the outcrop of the main lode, which was found running nearly north and south, and of great width. He had selected and set apart for the Museum of Geology specimens of the copper ore then being raised from the numerous workings, which were visited after ascertaining the position of the veins of ore appearing on the surface. These veins extended at the bottom to the full width of the level; not less than 6 ft. from the footwall of the lode, the hanging-wall of the same not having been reached. This hanging-wall is some 46 ft. east. He next visited what is known as the No. 1 sump, and here also found the veins of ore as seen on surface and in the adit level, but again much richer and more massive. A number of blasts were made in this sump, under the Professor's direction and in his presence, and on each occasion the quartz matrix was found richly charged with copper pyrites. Portions of the ore so obtained were taken away by the Professor for the collection at the Royal School of Mines in Jermyn-street, where they have since been inspected by practical mineralogists; they speak highly of their value, and confirm the statement that they largely exceed, in fine copper, the average of the United Kingdom. He then inspected the deeper parts of the mine, the workings being still upon the veins of ore which had been seen on the surface, but which now filled up the entire level. A number of test blasts were again made, extending over the whole of the ground at this point, with the same highly satisfactory results. The Professor expresses, it may be added, a very favourable opinion as to the great value and mineral resources of these mines. His inspection took place in the month of May last.

It appears that the mines themselves are well placed for convenience and economy in working. They are situate on a gentle incline, perfectly free from overhanging ground, while at the same time possessing an ample water supply. The surface and bed-rock are not hard, and the piercing is found to be comparatively easy. The surrounding roads are good. There are no difficult gradients in the descent to the town of Conway. From Conway the ore is conveyed direct to the smelting works, either at Amllwch, at Swansea, or at St. Helen's (where there are a large numbet of such works), and it has a ready and immediate sale at high prices. It should be mentioned that there is not only a good railway station at Conway, but also a shipping port to any part of the kingdom. The mines also enjoy the advantage of being in a neighbourhood where labour is exceptionally cheap and abundant. It is a matter of notoriety that the Welsh miner is content with far less wages than his brethren in Cornwall or Devon, or any other of the great mining centres. The purchase money has been fixed at 100,000*l.*, of which only 15,000*l.* is at once payable in cash, the remaining 30,000*l.* of the money portion of the payment being returned by the directors to secure for two years the minimum interest of 20 per cent. per annum guaranteed by the vendor—Mr. W. A. Bradley, of Nannerch, Flintshire—in the 165,000*l.* of capital now issued. It need scarcely be mentioned that the investment of this 30,000*l.* will, with the interest obtainable thereon, provide the 33,000*l.* required for the two years guaranteed interest. The directors are anxious not to appear unduly sanguine in their estimate of the profits which will be divisible, but would mention that upon the present capital the figures they have given show a profit from the business of from 60 to 55 per cent. per annum

GREAT WHEAL POLGOOTH.

It is desirable that the shareholders should not be disheartened by any adverse statements they may hear concerning this company. The mine is undoubtedly valuable, being situated on the southern slope of the granite boss of central Cornwall and surrounded by dividend mines such as Great Hewas, Great Polgooth, and many others, which have sold collectively millions sterling of ores. The property is traversed by the same series of lodes, and these are embedded in the same congenial strata as those in the mines referred to, being in addition associated with elvans and intersected by cross-courses. No practical mineralogist can doubt that wealth equal in proportion will result. The elvans are more or less stanniferous and one of them in particular has been wrought on to a great extent by the ancients. This elvan is accompanied on each side by a metallic vein or lode, from which run numerous branches or leaders crossing in all directions. To precisely similar geological conditions many of the richest mines in Cornwall owe their wealth. Many years ago the adit level was extended below the ancient surface workings, and here the excavations are of great extent. The character of the property is given in a letter which appeared in the *Mining Journal* of March 15, 1873, in which Mr. Wm. Brokenshire states:—"These mines have been worked from time to time even as far back as the Phœnician period, which facts are confirmed by old tools found in the debris. The Godolphin family is also said to have worked the mines at great profit. The great tin course which runs through this mine, I understand, is over 25 feet in width, and its productiveness must appear when we look at the enormous excavations from surface down to 20 fathoms, which is down to the water line. After the Godolphin family had ceased working the mine the farmers of this place worked it. They got a grant for a certain length of time from the Lord of the Manor, to whom they paid 1-15 "dish," or royalty. I remember my father taking a grant or claim in the great tin course; it being so rich in places that one morning early he commenced working, and by breakfast time he broke more than 80*l.* worth of tin ore. Thus profitably did the great lode continue to be worked by the farmers of this place until they took away all the richer portions then available. I have always felt an interest in the great tin course, perhaps on account of my family being greatly benefited by its yield of tin ore. It gave many hundreds of pounds in dividends to my father. I feel much interest in the new project, believing as I do that it will be crowned with success."

Again on Feb. 15 of the same year a paragragh in the Journal states:—"These mines have been inspected by Captains Pope, Harris, Trelease, Bowden, Phillips, and other well-known mine agents. They say there is a large tin course running through the centre of the sett, character very good; this large course being an elvan accompanied on either side by a large lode, and 'jets' or 'sprouts' running or crossing from one to another. The lode on the north side is 6 ft. wide, the one on the south side 10 ft. wide, yielding on an average 2 cwts. of tin to the ton of stuff. The whole mass for 30 ft. in width will yield 20 lbs. to the ton. Estimating the number of cubic fathoms opened, over 1,000,000*l.* worth of tinstone can be seen; and estimating what has been done with the labour of only 10 men and the water stamping power of only six heads, they say 80 heads of steam stamps would make marketable 26 tons of tin ore monthly; which at its present price would give a net profit of 23,640*l.* per annum." It is of course impossible to say whether or not these figures will eventually be realised, but it is considered that by a practical developement of the mine good results will be achieved.

NEW GREAT WHEAL VOR.—The discoveries in these mines are reported to be of an extraordinary character. It is said that every day, from a depth no greater than 8 fms., rocks of tin ore are being brought to surface. The stuff raised is of superior quality, and in large quantities, and experts declare it to be without precedent in their experience. The parties interested in the mine challenge enquiry, and declare that those who take the pains to enquire will not be disappointed, but will find this an uncommon investment. Mr George Henwood has made a special report on the mine.

EAST HERODSFOOT SILVER-LEAD MINE.—The cross-cut adit is approaching Bewe's lode in a strongly mineralised stratum, with very favourable prospects. During the last day or two they have cut water in the end, and consider the lode is very near, and as the gossan in the costean pits is of the very finest quality a good lode is expected.

PELYN WOOD COPPER MINE.—A company has been formed on the Cost-Book System to work this mine. All the shares (12,000) have been subscribed, and Wm. Battye, 16, Great Winchester-street, E.C., appointed secretary.

SOUTH WALES INSTITUTE OF ENGINEERS.—The general meeting of members was held at the Royal Hotel, Cardiff, on Thursday. Owing to the unavoidable absence of the president, the chair was taken by Mr. David Thomas, vice-president. The minutes of the last meeting were read and confirmed. All the candidates for admission as members were ballotted for, and duly elected. Several new members previously elected were formally admitted by the president. The discussion on Notes on Compressed Air, by Mr. W. H. Massey, a paper read at the last meeting, was resumed, and the discussion closed. A paper was read by Mr. M. G. Johnson on the Working of Steep Seams, but the discussion on it was adjourned till the next meeting. A paper by Mr. William Crossley, a Description of Crossley's Patent Compressed Air Safety Mining Lamp, was adjourned till the next meeting. The discussion on Mr. Hart Huxham's paper on Suggested Improvements on Foster and Fleuss's Safety Lamp was brought to a close. The discussion on the president's paper on the Somersetshire Coal Field, and the Mode of Working Thin Seams, was adjourned till the October meeting, in consequence of the absence of the president. A paper on Structures, and the Strains they are Subjected to, by Mr. Thomas Evans, was ordered to be printed in the Transactions of the Society. At the conclusion of the meeting the members dined together as usual, under the presidency of Mr. David Thomas.

UNITED STATES SLATE PRODUCE.—The slate trade of the United States is increasing rapidly. Last year the capital invested amounted to nearly 2,000,000*l.*, and the produce reached 600,000 squares, Pennsylvania alone producing 320,000. The quarries in that State have been worked about 15 years. The largest quarry, which contains 60 acres, and employs about 200 men, was opened in 1865, and turned out last year 40,000 squares. The most durable slates are those from Maine and Southern Pennsylvania, and in colour are dark blue and blue black. The fancy slates—green, purple, red, and variegated—do not keep their colour well. Red slates fetch the highest price—from 28s. to 36s. a square.

THE CHURCH BURN LEAD MINING COMPANY (near Haltwhistle, Northumberland).—The operations of this company which began about two years ago have been attended with great success. With the expenditure of but little capital the company opened up the old level which had been driven about 30 years ago to cut the great vein of the mine, and after pushing it ahead some 15 fathoms struck a powerful vein about 15 ft. wide, rich in lead ore of a superior quality, showing nearly 90 per cent. of lead. The mine is very favourably situated, being within 200 yards of the public road to Hexham, and there is an abundant supply of water for washing purposes flowing in the Burn past the level entrance. The present level drains the mine to a depth of 45 fms., and another level can be set on when required to a depth of 45 fms. more, so that the ore can be got out to that depth without the expense of any pumping machinery. The

first sale of 150 tons of ore took place last week and yielded 8*l.* 11s. per ton, the purchaser removing it from the bingsteads at his own expense. The company have a territory of some square miles, and as there are several other veins to be wrought the quantity of ore to be got out is practically only limited by the working room and men to be employed. About 20 men are now at work in the mines on this great vein, and others are employed in exploration work under the company's mining agent, Mr. Clementson, and there is every reason to believe that the mine will turn out one of the most profitable in a district where so many fortunes have been made by lead ore mining.

GLIMPSES OF THE OLD CORNISH MINERS.

By JAMES QUICK,

Of the Board of Trade, London, Compiler of a "British Maritime Gazetteer," and author of papers on "Cornish China Clay," the "Cornish Pilchard Fisheries," and on various other subjects connected with Industries of Cornwall, &c., &c.

It is the purpose of this paper to delineate generally the character and condition of the bygone miners of Cornwall and Devonshire, the study of whose history is replete with attractions for those loving remarkable facts or superstitious lore. A line drawn from the west coast of Cornwall a few miles north of Tintagel to the neighbourhood of Exeter would roughly divide from the rest of our island that portion of the West of England in which the most important metallic deposits have been found. It is said that westward of such a line almost every known metal has been traced, but it is chiefly to the vast abundance in which the ores of tin and copper have been and are still mined in Cornwall and Devonshire that the two counties owe their importance as a mining district. And, doubtless, the tin-raising industry in the West of England can claim an earlier origin than any other and similar enterprise at present in existence. It is generally supposed that the Cassiterides, whence Herodotus says the Phœnicians derived their tin, refer to Britain, and Dr. George Smith, of Camborne, in a learned little work (1), consisting chiefly of quotations and deductions from the Greek and Roman writers, fully establishes the probability of such a conclusion. Numerous bronze spears, celts, and other implements, and especially a bronze bull, all found in Cornwall, and undoubtedly of Phœnician workmanship, also support the opinion, whilst Robert Hunt, Esq., F.R.S., Keeper of Mining Records, and one of the most eminent authorities on matters relating to Cornish mining, seeks (2) to trace an analogy and connection between a Cornish giant story concerning the discovevy of tin and the tales of the Phœnician gods Melkarth and Tubal Cain. The custom of dancing through the streets on Flora-day (8th May), still practised at Helston and formerly at the Lizard, and the festivities indulged in on that day are thought by many antiquaries to be relics of Phœnician religious rites. It has also been suggested that the custom of lighting bonfires on the hills in the mining districts in the month of May may have some connection with the Phœnician fire-worship. It has even been surmised that tin was obtained from the west of Britain in the pre-historic age of bronze, and possibly at an epoch of the earth's history still more remote, and contemporaneous with the existence of the mammoth in that period when the general level of Cornwall and Devonshire was at least 30 ft. higher than it now is, or when the primæval forest, whose remains submerged by the sea are still discoverable, flourished around the present coast-line of the two counties. The discovery of human remains (3), and in one instance of a perfect human skeleton many feet below the surface, and under the detrital tin deposits which may have required ages to form, opens up a wide field for geological inquiry. Some pieces of smelted copper found in the black mould at the bottom of the Kent's Cavern, near Torquay, may also point to the conclusion that copper was raised in the two counties at as early a period as was tin. The antiquity of Cornish copper mining is, however, a subject which requires much further antiquarian research before any definite conclusions can be deduced.

That tin was raised in Britain during the Roman occupation of our island is proved by the direct testimony of Diodorus Siculus, of Strabo, of Pliny, and of Julius Cæsar, and the passages from those writers which refer to Britain will be found in the little work by Dr. Geo. Smith, already noticed. But the view that is given of the character and condition of the ancient British miners in the statements of Diodorus concerning Britain must serve as the excuse for repeating those much quoted statements here. Speaking of the inhabitants of Britain, after alluding to the ancient Phœnician trade with our island, Diodorus, who wrote just prior to the commencement of the Christian era, says —"They are of much sincerity and integrity, far from the craft and knavery of men among us, contented with plain and homely fare, strangers to the excess and luxury of rich men. . . . They that inhabit the British promontory of Balerium by reasons of their converse with merchants are more civilised and courteous to strangers than are the rest. Those are the people that make the tin which they dig out of the earth with a deal of care and labour, and the ground being rocky the metal is mixed with veins of earth out of which they melt the metal and then refine it; then they beat it into four square pieces like a die, and carry it to a British isle near at hand, called Ictis (St. Michael's Mount), for at low tide all being dry between them and the island, they convey over in carts abundance of tin in the meantime." I also find the minor writer, Caius Julius Solinus, who, according to Salmatius, lived about 200 years after Pliny, speaks in his Polyhistor of Britain, being "stored with metals," having "many rich veins of metals on all sides." It may also be noticed for what it is worth that the bungling geographer, Pomponius Mela, who flourished in the reign of Claudius, states in his work, *De Situ Orbis*, after speaking of Sarmatia, that the isles which lie against that country, owing to their abundance of tin and lead, are called Cassiterides, and then at once proceeds to a description of Britain, evidently showing, despite the writer's ignorance of actual facts and position of places, that tin was in his day generally known to have been brought from islands in the west of Europe.

Yet whether the Cornish mines were worked during the Roman supremacy by the Britons themselves, or by the Britons as slaves under the Romans, is an open question. The presence of Roman stonework at St. Agnes, Wendron, Illogan, and a few other places in Cornwall, and apparently erected in connection with mining operations, might point to the conclusion that the Romans, at least, superintended or took an active interest in the raising of the metal. Professor Phillips, in an essay contributed to the Archæological Journal on the statements of Pliny concerning British mining, expresses his opinion that the Romans allowed the Britons to work their various mines, whilst they themselves appropriated the produce, and he gives illustrations and explanations of various blocks or pigs of lead bearing Roman inscriptions found in different parts of Britain. The custom of periodically playing the old Roman game of Quintain, on Halgaver Moor, near Bodmin (4), observed, we believe, until very recently, and the discovery at several places in Cornwall of Roman coins might also show that the Romans had considerable intercourse with the West of England.

No direct record of mining in Cornwall during the Saxon and Norman periods of our history has yet been found. But the multiplicity of Cornish saints (4a) made during those times, and after whom many Cornish towns are named, and the resistance which the Britons of the West of England offered to the invading Saxons should show that the district was then of more importance than is generally supposed. Egbert after some severe struggles drove the Britons from Exeter (the limit as we have said of the mining district) back into Cornwall. But in the reign of Athelstan they had regained their ground, and it required all the military skill of that monarch again to subdue them to the Tamar. Dr. Borlase, in his Antiquities of Cornwall, also tells us that in west Britain important shelter was afforded to the vessels of the Danish marauders who molested the Saxons, and if during Saxon times the ancient Britons were so well organised and formidable a race, as from these facts they would appear to have been, it seems exceedingly improbable that their industry of tin raising was then neglected.

Cornish tin mining is not mentioned in Domesday Book, probably, as Sir E. Smirke, keeper of the Tower Records, supposes (5) on account of the mines being then already regarded as Crown property. For from a remote period and for many centuries the Crown exercised remarkable prerogatives over Cornish mining. It claimed the right of buying if thought practicable all or any quantity of the tin ore raised in preference to any one else, and at its own price, and it was, of course, the head of all Stannary matters, notwithstanding that there were Stannary Parliaments (6) for making all laws on mining affairs, and which appear to have existed in some form from time immemorial, and in the 16th and 17th centuries acquired considerable power. A charter of the liberties of the Stannaries of Cornwall and Devonshire was granted so early as the third year of the reign of John. Other important charters to the tinners were granted in the reigns of Edward III. and Henry VII., and a writer on the Stannaries in 1750 remarks of them that they "are as well established by charter and Act of Parliament as any particular constitution can be." For carrying out the laws made by the Stannary Parliaments there were at different places Stannary Courts, where rolls were kept containing the names of all the tinners, as the workers in the mines of Cornwall and Devonshire were until within the last 50 years commonly called. In all matters of complaint the tinners "were judged by their own laws before the judges of the Stannaries," and they were "exempt from all other jurisdictions of the kingdom in all causes within the Stannaries amongst them, except in such as affected land, life, or limb."

Tradition tells us that the Jews from the time of William the Conqueror down to their expulsion from the kingdom in 1290, were in large numbers engaged in Cornwall in smelting the tin ore and in buying the tin from the miner, or forming an intermediate person between him and the foreign merchant, and in this matter, in spite of the opposite view of such an eminent researcher as Professor Max Müller, we are inclined to accept the authority of tradition. The accomplished member for East Cornwall—W. Copeland Borlase, Esq., M.P., M.A., &c. (7)—draws attention to the fact that in a document regulating the levy of the Crown duties on tin in Cornwall, by William de Wrotham, who was made Lord Warden of the Stannaries by Hubert, Archbishop of Canterbury, during the absence from England of Richard Cœur de Lion, the expression "neither Christian nor Jew" occurs no less than four times, manifesting that the Jews must have been in Cornwall in noticeable numbers. The same document also, by the way, sets forth that the diggers and buyers of the tin should retain their ancient customs and liberties, thereby evidencing that the Cornish miners must, as we have been showing, have long before been an important class. The term "Jew's tin," applied by the miners to large quantities of partly smelted tin occasionally found in different parts of Cornwall and Devonshire, the numerous Jewish signatures occurring in old documents anterior to the times of the Puritans when, it has been argued, the Jewish names may have been adopted, as well as the traffic which appears to have been kept up between Cornwall and the Mediterranean in the 12th and 13th centuries, are all facts in favour of the conclusion that there were in those centuries large numbers of Jews in Cornwall (7a).

[*To be continued in next week's Mining Journal.*]

1.—The Cassiterides. London: Longman.
2.—In Good Words, 1867.
3.—See Henwood's paper on "Detrital Tin Ore," in Journal of Royal Cornwall Institute, 1865.
4.—Noticed in W. Carew Hazlitt's edition of Brand's Antiquities.
4a.—St. Picrous, St. Peran, and St. Chigwidden were the patron saints of Cornish miners. An account of St. Peran will be found in the "Age of the Saints," published in the Journal of the Royal Institution of Cornwall, by W. Copeland Borlase, Esq., M.P., &c. St. Chigwidden is a myth, but there are some stories about him in Hunt's Romances and Drolls of the West of England.
5.—See Gentleman's Magazine, vol. xiii., 1862.
6.—For an account of the old Stannary Parliaments and Stannary Courts see a paper on the subject by the author of this one in the Journal of Science for April, 1879.
7.—In his Sketch of the Tin Trade of Cornwall, Plymouth, 1874.
7a.—The writer of an old MS. in the Harleian Collection (6380) holds a contrary view, and supports his opinion by stating that although the Jews were banished from the kingdom in 1290 the Cornish tinners had by 1350 attained such importance that they were granted a Stannary charter. He evidently overlooked the fact that a charter on the rights and privileges of the Stannaries of Cornwall and Devonshire was granted by John so early as 1202.

WHEAL JANE,

WANTED, a MANAGING AGENT.—Applications to be addressed to the London Office, care of GRANVILLE SHARP, Esq., 32, Queen Victoria-street, or to Mr. JOHN HOCKING, Redruth, not later than the 27th instant.

WANTED, a MINE AGENT for an INDIAN GOLD MINE.—Address, with copies of testimonials, "Tambracherry Company," 32, Great St. Helen's, London, E.C.

FLAT RODS.

WANTED, for the WEST LISBURNE SILVER-LEAD MINE, 350 fms. of 1⅝ or 1¾ in. FLAT RODS, delivered at the Railway Station, Strata Florida, near Aberystwith.
Address, Mr. W. BATTYE, 16, Great Winchester-street, London, E.C.

WANTED, a CLERK for a SILVER-LEAD MINE near CARDIGANSHIRE. State salary expected and testimonials.
Address, "S. Y.," MINING JOURNAL Office, 26, Fleet-street, London.

CAPTAIN ABSALOM FRANCIS, M.E.
GOGINAN, ABERYSTWITH

ATMOSPHERIC INFLUENCE ON MINING OPERATIONS.

Those connected with mines in which gas is given off should feel indebted to those meteorologists who from time to time make known in the shape of warnings marked atmospherical changes that are likely to have some influence on the safety of those engaged in mining operations. During the present week one of those warnings was again addressed to mine managers, who were advised to be on their guard against the accumulations of gas in mines, for while the atmospheric pressure was very unfavourable to the escape of gas reaching the surface, the temperature of the external air was increasing to such an extent as to materially affect the ordinary ventilation. It may be said that the warnings are generally based on the readings of the barometer, which those connected with mines would do well to constantly consult, although it may not be so reliable as some persons think. A good barometer will show a change in the atmosphere, and no sooner is there a movement either high or low than the pressure on the space, or the pores through which the gas escapes, is either less or greater, and, consequently, the quantity of gas will be determined by the amount of ventilation. The gas existing in a mine and the atmosphere are so closely connected together that the slightest movement in the one is indicated in the other. In mines the atmospheric pressure acting on the face of the work where the fissure of the rock contains gas opposes certain resistance to its escape, so that it escapes most largely when the atmospheric pressure is slight, whilst if that augments it may happen that the escape of fire-damp will cease altogether. With respect to atmospherical influences and the value of the barometer with regard to the exudation of gas from coal there are considerable differences of opinion, but it is pretty generally admitted that in the goaves where large accumulations of gas take place the barometer is invaluable as affecting it. In the goaves the gas has plenty of room to expand, and it comes out into the working places or roads, and coming in contact with a naked light cause an explosion. In such cases the variations of the barometer are of considerable importance.

It should be recollected, too, that the walls of subterranean excavations are generally warmer in winter and colder in summer than the atmospheric air, and that there exists in the spring and autumn some accidental differences of temperature, sometimes one way and sometimes the other. Some experts also hold that at all seasons of the year there is with a south wind the lowest barometer, the highest thermometer, and vapour tension in the air the highest; and although the difference may be comparatively small, it shows that the observations of practical men agree with the most carefully recorded meteorological observations. It should also be taken into consideration that from the carefully considered observations made by Messrs. SCOTT and GALLOWAY, extending over four years, 54 per cent. of explosions in coal mines were indicated by a fall of the barometer, and 19 per cent. when there was a rise of the thermometer. On all hands it is admitted that atmospherical influences affect the ventilation of mines, for the change in the temperature and pressure may reduce the ventilating pressure of the mine, and might act in two ways—it not only slightly reduces the ventilating pressure but might allow gas to expand. In calling attention to atmospherical influences in connection with mines and the warning that has been given, we do so for the purpose of sparing persons in charge of mines the desirability of paying attention to the barometrical changes that are now taking place.

VEHICULAR LOCOMOTIVES ON COMMON ROADS.

The road-railways of Italy, as referred to in last week's *Mining Journal*, may be regarded as the most advanced system of vehicular locomotion on common roads yet devised, and the introduction to English capitalists of a company connected with their development affords an inducement to trace the progress of invention in this direction during the past two centuries—a step which can very readily be taken by consulting the volume of Abridgments of Specifications relating to carriages and other vehicles for common roads, just published at the Commissioners of Patents' Sale Department, Cursitor-street; and it is curious to find the great antiquity of some of the "new" inventions recently introduced, although the Italian road railway system does not appear to come within the category of re-inventions. Quite recently much approval has been expressed with regard to the lever arrangement for enabling the driver of an omnibus, or other vehicle, to put the brakes on the back wheels when necessary. As to the novelty of the invention it will suffice to state that on Jan. 7, 1625, Mr. Edward Knappe patented "a devise whereby the coachman without comying from his boxe shall in anie descent of grounde keepe the hinder wheeles from turninge soe as the carriage shall goe downe hill with noe more hurt or danger to the passingers or horses then in playne grounde." But users of the invention may be congratulated upon the little risk they run of the original inventor making any claim for royalty. The arrangement for freeing horses from vehicles by pulling a string so as to avoid injury in case of a horse running away appears to have been first patented in 1733; and about the same time, probably from the execrable condition of the roads, the most fashionable inventions of this class appear to have been for varying the distance from each other of the wheels, so as to get them into the best ruts in the road, and lessening the injury to travellers when the carriage turned over—the idea of preventing the upsetting altogether seems to have occurred to inventors much later.

At the end of the sixteenth century the inconvenience of getting along the roads with wheel carriages appears to have become manifest, for in October, 1691, Kendrick Edisbury patented "a new art or invention of certaine rollers to be vsed vnder the bodies of carriages, carts, and waggons instead of wheeles, which will be farr more vseful by amending and preserving as well the high wayes as private grounds." This invention has been many times since then patented. In 1814 Lewis Gompertz proposed legs and feet as substitutes for carriage wheels. This is the same inventor subsequently known to the readers of the *Mining Journal* for his square wheels, which he maintained were far superior to round ones, and it must be admitted that his square wheeled vehicle went along quite smoothly. These curious inventions might be cited to almost any extent, but it is preferable to refer to the volume itself, which, although filling nearly 1300 pages, is obtainable, being an official document, for 5s,, and will afford a vast amount of amusement as well as instruction, It comprises all inventions of the class from 1625 to 1866, those of the succeeding 10 years being reserved for the second volume, in course of preparation.

VAN MINES—MONTHLY REPORT.

July 21.—As under, pleased find my monthly report:—We are pushing on the 120 west end as rapidly as possible with six men. The indications are still very favourable, and we shall have another trial of the lode in a day or two. I have suspended the driving of the 105 east for a short time, and placed the men to assist in the driving of the 120 west. We appear to be entering an improved section of ground in the 15, and from its present appearance it looks as if ere long we shall get hold of the ore ground which we are in search of. All the stopes throughout the mine are much the same in width and value as reported last month. The men from the rise in the back of the 105 west have been removed for a short time to complete a rise in back of the 75 east, for the purpose of facilitating the filling up of the stopes in that section.—Van Hill: I am glad to be able to report that we are looking very encouraging here. Since resuming operations we have intersected a very strong lode, letting out water very freely, and producing nice cubes and spots of lead ore. When we are satisfied that we are through the lode we shall drive the level westwards a'ong its course; and as every fathom we drive will give us greater cover, we may look for good results here.—Surface: At surface everything is going on steadily. We hope to finish our hay harvest to-morrow, all of which we shall have had in good order. Our sales this month are 200 tons of lead ore and 100 tons of bende.—W. H. WILLIAMS.

CALIFORNIA ACADEMY OF SCIENCE.—The printing of the proceedings of this society has been recommenced; the first number of the new issue containing interesting papers on Early Discoveries of Wrangel Land, with some evidence regarding conflicting claims, by Mr. C. W. Brooks, and certain other matter bearing upon the same subject. The secretary writes that during the commercial depression which has pervaded all countries for six or seven years, the Academy has keenly felt the loss of a large membership, and in endeavouring to keep alive the interest of its meetings, and to arrange and keep open its museum to investigators and visitors, it accumulated some indebtedness. It was impracticable to publish the proceeding under snch circumstances, but the members have persevered in their work, and although the membership has been largely reduced, the regular attendance at the meetings has increased. The Board of Trustees, having charge of the temporalities of the Academy, have earnestly striven to reduce the indebtedness, and have nearly succeeded, so that it is believed that by the close of 1881 the Academy will be out of debt. Thereafter we will publish not only the current proceedings but the proceedings of the last four years.

FORTUNATE MINING.—For more than 300 years the mines of Pachuca are said to have been worked by the Mexicans; but the original operators secured poor returns compared with what are now being netted. There is an English colony at Pachuca, said to consist of 350 men, women, and children, and they nearly all hailed from the district of Cornwall. The first Cornish miners arrived there about 50 years ago. The most noteworthy of all the instances of poor men striking it rich is that of the Santa Gertrudis Mine, which is now "in bonanza." It had successively been worked and abandoned years and years ago, and was taken to work—by a Cornishman who has just died. Forming a small company in 1877, he commenced active work. After it was proved that the mine was paying he sold out his share—9-25ths—for $15,000. Since then 1-25th has sold for $80,000, the present price per bana or share. This would give at that rate $720,000 for what he got but $15,000 for. The mine has been "in boranza" now for three years, and is yielding about 3000 cargas of 300 pounds each of metal weekly, and giving a clear profit of $1000 per day. From June, 1877, to March, 1881, the mine produced $2,800,000, and declared 32 dividends of $20,000 each—$640,000: $100,000,000 is the amount declared on good authority to have been extracted from the Rosari Mine in the same district since it was started in 1850, and the books show that there has been paid $500,000 per share in dividends.

ST. BRIDE'S WELSH SLATE AND SLAB COMPANY (Limited).—The usual compulsory winding-up order has been made, but not to be drawn up for a week, to enable, if possible, an arrangement to be made with the petitioner. Mr. Bucknill was for the petitioner

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
July 12	Church Burn	150	£ 8 11 0	Walton and Co.
16	Foxdale	100	9 13 0	Quirk, Barton, & Co.
21	Roman Gravels	50	9 5 6	Sheldon, Bush, & Co.
—	ditto	50	9 6 6	J. H. Moore.
—	Van	40	10 11 6	Adam Eyton.
—	ditto	60	10 3 0	Panther Lead Co.
—	ditto	40	10 6 0	ditto
—	ditto	40	10 8 0	Weston, Son, and Co.
—	ditto	20	10 3 0	ditto

BLENDE.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
July 21	Van	100	£2 0 6	J. F. Kimmell.

THE RUBY AND DUNDERBERG CONSOLIDATED MINING COMPANY (LIMITED).

Notice is hereby given, that an **EXTRAORDINARY GENERAL MEETING** of the Shareholders of this company will be **HELD** at the offies of the company, 5, Crosby Square, London, on **TUESDAY**, the 26th day of July, 1881, at One o'clock, to confirm the following Special Resolution passed at the Extraordinary General Meeting of the members of the company, held at the Cannon-street Hotel on the 28th day of June last:—

"That the sale of the Mines called the Lord Byron and Valentine Mines, referred to in the Memorandum of Association, dated 14th June, 1881, and in the Circular to the Shareholders, dated 18th June, 1881, is hereby adopted and is confirmed."

By Order, J. FORSTER HAMILTON, Secretary.

The Company's Offices, 5, Crosby Square, London, E.C., 15th July, 1881.

LA PLATA MINING AND SMELTING COMPANY.—Incorporated with Limited Liability under the Laws of the State of New York.

The Board of Directors have DECLARED a DIVIDEND of $15,000—SEVEN AND A HALF CENTS PER SHARE—out of the profits for the month of June, PAYABLE on 1st August, leaving at credit of Reserve Fund, $56,826 41 c.

F. ANDREWS, London Registrar.

21, Great Winchester-street, E.C., July 22, 1881.

MINE "EL CALLAO," GUAYANA, VENEZUELA.

COUPONS OF SHARES..... 322

Gold in bars produced in the month of May, 1881, and remitted to Messrs. Baring Brothers and Co., London, 6624·69 ozs.

DIVIDENDS distributed for each coupon, $100.

(Signed) A. J. CAGNINACCI, Vice-President.

(Signed) VICTOR J. GRILLET, Treasurer.

LAS CALDAS FREEHOLD MALACHITE COPPER MINING COMPANY (LIMITED).

Business in these Shares at close Market Prices.

Messrs. WARD AND CO., 184, PALMERSTON BUILDINGS OLD BROAD STREET, LONDON.

GLASGOW AND THE HIGHLANDS.

ROYAL ROUTE VIA CRINAN AND CALEDONIAN CANALS by Royal Mail Steamer, COLUMBA or IONA, from GLASGOW daily at 7 A.M., and from GREENOCK at 9 A.M., conveying PASSENGERS for OBAN, NORTH and WEST HIGHLANDS.

Official Guide Book, 2d.; Illustrated Copies, 6d. and 1s., by post, or at Euston, St. Pancras, King's Cross Railway Bookstalls, London.

Bill, with Map and Tourist Fares, free by post, from the Owner, Mr. DAVID MACBRAYNE, 119, Hope-street, Glasgow.

ALEXANDER SMITH, M.Inst.C.E., CONSULTING ENGINEER and VALUER of IRONWORKS, MINING, RAILWAY, ENGINEERING, and other PROPERTY, PLANT, and MACHINERY,

1, PRIORY STREET, DUDLEY.

Mr. SMITH has been retained for nearly 20 years by some of the most prominent firms, and has conducted many of the larges valuations that have taken place in the kingdom

Valuations for Stock Taking or any other purpose upon very reasonable terms.

THE "JAMIN" PATENT ELECTRIC LIGHT

COMPAGNIE GENERALE D'ECLAIRAGE ELECTRIQUE.

Capital, 8,000,000 Francs.

Proprietors of the Gramme Patent Machine for Alternate Current

J. A. BERLY, C.E., A.S.T.E., &c.,

Engineer, and Sole Agent for Great Britain and the Colonies

16, NEW BRIDGE STREET, LONDON.

ALFRED E. J. TREGAY,

MINERAL BROKER AND GENERAL COMMISSION AGENT,

ROCHE, CORNWALL.

CHINA-CLAY. OCHRES. GROUND MINERAL COLOURS.

Correspondence solicited.

THE MINING INQUIRY OFFICE

262, GRESHAM HOUSE, E.C.

DALSTON AND CO.,

29, THREADNEEELE STREET, LONDON, E.C.,

Have Agents throughout the United Kingdom and all parts of the World.

Intelligence obtained on Foreign Loans, Railways, Public Works, Gold, Tin, Copper Mines, &c.

HOME MINING INTELLIGENCE SUPPLIED FREE.

WILLIAM M. VIVIAN, M.Inst.M.E., EXAMINES and REPORTS on MINERAL PROPERTIES, also PREPARES PRIVATE REPORTS on new concerns for intending investors.

Estimates given for erecting Machinery, Pitwork, Sidings, and Developing Mines. Ten years' experience. Highest references. Terms low.

ADDRESS—LLANTRISANT, SOUTH WALES.

MESSRS. THOMSON AND CO.,

STOCK AND SHARE DEALERS.

44, THREADNEEDLE STREET, E.C.

BANKERS: ROYAL EXCHANGE.

Business transacted in every description of Stocks and Shares.

TREVINCE CONSOLS.—Attention is called to the report in this day's Journal. An important rise in the price of shares must take place—price 22s. 6d.

ATTENTION IS PARTICULARLY DRAWN TO THE FACT THAT THIS IS A GOING CONCERN.

THE TAVISTOCK GREAT CONSOLS (LIMITED).

Capital £80,000, in 80,000 shares of £1 each.

First issue—60,000 shares, of which 20,000 are reserved for part payment to the vendors.

Payment as follows:—1s. on application, 1s. 6d. on allotment, and the balance by instalments of not more than 5s. each, and at intervals of not less than one month.

REGISTERED OFFICES—7, LOMBARD COURT, LONDON, E.C.

Prospectuses may be had, when ready, on application to the secretary, at the offices of the company, 7, Lombard-court, London, E.C.

BUENOS AYRES (NEW) GAS COMPANY (LIMITED).

INCORPORATED 1875.

ISSUE OF £70,000 SIX PER CENT. DEBENTURES, being balance of a total authorised issue of £200,000, secured by mortgage to trustees in London of the entire property of the company.

The Directors of the BUENOS AYRES (NEW) GAS COMPANY (LIMITED) are prepared to RECEIVE APPLICATIONS for ALLOTMENTS of the ABOVE AT PAR.

The debentures are to bearer for £100 and £50 each, repayable in 1896, with interest coupons attached, payable in London half-yearly, on 1st January and 1st July.

The accounts of the company for 1880 showed a net profit of £23,540 10s. 3d.

A dividend of 5 per cent. for that year was paid upon the share capital of the company, and £1168 18s. 8d. was placed to a renewal fund.

Undivided profits, amounting to £11,472 0s. 11d. (including previous balances), were carried forward to the current year.

The business of the company is rapidly developing.

Applications for allotments of the above debentures can be made to the secretary at the company's offices, No. 1, East India Avenue, Leadenhall-street, London, E.C.; or to the company's brokers, Messrs. Haggard, Hale, and Pixley, 26, Austin Friars, London, E.C.

By Order, E. W. LAYTON, Secretary.

23rd July, 1881.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES' ACTS, 1862 and 1867, and of the NEW CHIVERTON MINING COMPANY (LIMITED).

TENDERS will be RECEIVED by the Registrar of the said Court on or before Saturday, the 30th day of July instant, stating the HIGHEST PRICE which will be given for

ONE 40 inch cylinder PUMPING ENGINE, 10 ft. stroke, 8 arm capstan, lifting jack, jigging machine, door piece from 4 to 5 cwts., dry tube, and sundry miners' tools, now being at the New Chiverton Mine, in the parish of Perranzabuloe, within the said Stannaries, and belonging to the said company.

To inspect the above, apply to Mr. RICHARD TRENERRY, in charge thereof, Coxhill, near Bolingey, and for further particulars at the Registrar's Office at Truro.

HODGE, HOCKIN, AND MARRACK, Truro, Solicitors.

(Having the conduct of the proceedings in the above Matter.)

Dated Registrar's Office, Truro, July 20th, 1881.

TUESDAY, AUGUST 2ND, 1881, AT THREE O'CLOCK (SHARP).

VALUABLE MINE SETT, MACHINERY, AND PLANT, IN THE PARISH OF CAMBORNE, CORNWALL.

MR. W. T. DAVEY (Auctioneer, &c., Redruth) has been favoured with instructions from the Committee TO SELL BY PUBLIC AUCTION, on Tuesday, the 2nd day of August, 1881, at Three o'clock in the afternoon precisely, at the Account House, on the Mine, the WHOLE of the very extensive MINING PROPERTY, known as the

PENDARVES UNITED MINES,

Situate in the parish of Camborne, in the county of Cornwall, together with the

LEASES, MACHINERY, PLANT, AND MATERIALS THEREON,

In One Lot, as a Going Concern.

The above Mining Property is about one mile from Camborne Railway Station and adjacent to the celebrated Dolcoath Mine, and is being held under a lease from William Cole Pendarves, Esq., on most favourable terms. It is confidently believed a very little further outlay will be sufficient to prove its merits.

Everything on the mine is of the best possible quality, and in perfect working order.

To view, apply to Capt. BRENTON, on the Mine; and for further particulars to SAMUEL ABBOTT, Esq., or to the Auctioneer, at his offices, No. 33, Fore-street, Redruth.

Dated Salem House, Scorrier, July 14th, 1881.

GLAMORGANSHIRE.

FREEHOLD HOUSE, LAND, AND MINERALS FOR SALE.

MESSRS. R. JONES AND SON WILL SELL BY AUCTION at the Wyndham Arms Hotel, Bridgend, on Saturday, the 13th day of August, 1881, at Two for Three o'clock, P.M., subject to conditions to be then produced, all that FREEHOLD FARM called "New House," otherwise "Ty Newydd," Bayden, containing by admeasurement 79 acres of land, more or less, whereof about 11 acres are woodland and the rest chiefly pasture, situate near Cefn Cribbwr, and in the Hamlet of Bayden, in the parish of Llangonoyd, Glamorganshire, and now in the occupation of Messrs. Edward Thomas and Rees Jenkins, as yearly tenants.

The house has recently been repaired at considerable expense, and is fit for the residence of a gentleman.

The minerals consist of all the same valuable seams of Coking, House, and Steam Coal, and Fireclay, as have been so extensively worked (to within half-a-mile of the property) at the Cefn Colliery, the property of C. R. M. Talbot, Esq. The Rock Vawr seam of coal, 4 ft. thick, with a capital rock roof, is got by a level on the property; and immediately below the coal is excellent fireclay that can be worked with the coal.

The property is little more than half-a-mile from the Llynvi and Ogmore Railway, by which means there is direct access to all parts of the kingdom, and the shipping port of Porthcawl is only 6 miles distant.

For further particulars, and permission to view, apply to the Auctioneers, at Bridgend; to ROBERT SOUTHERN, mining engineer, Burleigh House, Tredegarville, Cardiff; or to THOMAS STOCKWOOD, Solicitor, Bridgend.

MINE FOR SALE, BY PUBLIC AUCTION.—On Monday, the 8th August, 1881, at Nine o'clock A.M., WILL BE SOLD, BY PUBLIC AUCTION, at Lugano, Switzerland, at the Tribunal of that City, the VALUABLE SILVER AND GOLD MINE, called

"CAMERE."

Situated in the Commune of MIGLIEGLIA, formerly owned by Signori BAGLIONI and FRANZI.

The property will be put up at 100,000 fr.; deposit, 10,000 fr.

Conditions of sale are to be obtained of the Advocates, CARLO BATTAGLINI, LEONE DE STOPPANI, and GIOVANNI SOLDATI, Lugano.

TO BE LEASED, BY PUBLIC AUCTION, on Tuesday, the 10th day of January, 1882, at the Crown Lands Office, in the Athenæum Building, St. John's, Newfoundland, the following

MINING AREAS,

Reserved to the Crown under the laws relating to MINES and MINERALS, out of various licenses to search heretofore granted, in such Lots, and upon such terms and conditions as shall be hereafter prescribed by the Governor in Council:—

1.—About 2 square miles, being the residue of a license to search for minerals granted to Messrs. A Guzman and Wm. Stirling, situate on the north side of Little Bay, Notre Dame Bay, from which they have selected 1 square mile—the said square mile being what is known as the Little Bay Copper Mine, now in active operation.

2.—About 2 square miles, being the residue of a license to search for minerals granted to Messrs. Josiah Colborne and Henry Knight, situate at Shoal Arm, on the south side of Little Bay, Notre Dame Bay, from which they have selected 1 square mile.

3.—About 2 square miles, being the residue of a license to search for minerals granted to Mr. Thomas Peyton, situate on the north side of Hall's Bay, Notre Dame Bay, from which he has selected 1 square mile.

4.—About 2 square miles, being the residue of a licence to search for minerals granted to Mr. James Norris, situate on the south side of Western Arm, Three Arms, Notre Dame Bay, from which he has selected 1 square mile.

5.—About 2 square miles, being the residue of a licence to search for minerals granted to Messrs. John Bowring and Robert Knight, situate on the south side of Green Bay, Notre Dame Bay, from which they have selected 1 square mile. This area is known as Nick's Nose claim.

6.—About 2 square miles, being the residue of a license to search for minerals granted to Messrs. White, Rogerson, and others, situate at Birchy Cove, on the south side of the South West Arm of Green Bay, Notre Dame Bay, from which they have selected 1 square mile.

7.—About 2 square miles, being the residue of a license to search for minerals granted to Messrs. White, Rogerson, and others, situate at Mansfield's Point, on the south side of the South West Arm of Green Bay, Notre Dame Bay, from which they have selected 1 square mile.

8.—About 2 square miles, being the residue of a license to search for minerals granted to Hon. Edward White, situate 1 mile inland from "Naked Man" rock, on the south side of South West Arm, Green Bay, Notre Dame Bay, from which he has selected 1 square mile.

9.—About 2 square miles, being the residue of a license to search for minerals granted to Philip Cleary, Esq., situate at Rabbitt's Arm, Notre Dame Bay, from which he has selected 1 square mile.

10.—About 5 square miles, being the residue of three licenses to search for minerals, granted to Philip Cleary, Esq., situate at Sunday Cove Island, Notre Dame Bay, from which he has selected 3 square miles.

11.—About 1 square mile, being the residue of a license to search for minerals granted to Messrs. Gilbert Browning, James Fletcher, Robert A Mackim, and James Browning, situate at Thimble Tickle, Seal Bay, Notre Dame Bay, from which they have selected 1 square mile.

12.—About 4½ square miles, being the residue of two licenses to search for minerals granted to Messrs. David Baird, James Goodfellow, and Alexander Smith, situated on the eastern part of Pilley's Island, Notre Dame Bay, from which they have selected 2 square miles.

All further information relative to the terms and conditions of letting, the extent of the several lots, &c., may be obtained on application at the Crown Lands Office, where diagrams of the several areas can be seen.

W. J. S. DONNELLY, H. M. Surveyor General.

St. John's, Newfoundland, July 5th, 1881.

GARESFIELD COLLIERY AND ESTATE, comprising 1900 acres, more or less, of FREEHOLD COAL; 500 acres, more or less, of FREEHOLD FIRE-CLAY; 50 acres, more or less, of LEASEHOLD COAL; 570 acres, more or less, of LEASEHOLD FIRE-CLAY; and 530 acres, more or less, of LAND; and the MINES OF COAL under the estate of Ravenside, containing 235 acres, more or less, all situate in the parish of Ryton, in the county of Durham, will be

OFFERED FOR SALE, BY PUBLIC AUCTION,

At Newcastle-upon-Tyne, on or about the FIRST WEEK in AUGUST, 1881.

Further particulars and information will be given in future advertisements, and can be obtained from Messrs. J. and F. ANDERSON, W.S., 48, Castle-street, Edinburgh; Messrs. J. and G. H. GEDDES, Mining Engineers, Edinburgh; Messrs. T. and R. ARMSTRONG, Land Agents, 14, Hawthorn-terrace, Newcastle-upon-Tyne; WM. GREEN, Esq., Mining Engineer, Thornelly House, Blaydon-on-Tyne; or Messrs. CLAYTON and GIBSON, Solicitors, Guildhall, Newcastle-upon-Tyne.

FOUNDRY TO LET, With SMITHS' SHOP. Stables can be had adjoining. Rent £150. Formerly occupied by Messrs. CUTLER, Parker-street, Little Queen-street, Holborn.

Apply at "The Freemason" Office, 16, Great Queen-street (opposite Freemasons' Hall).

IMPORTANT TO MINING CAPITALISTS, AND OTHERS.

TO BE LET, on most reasonable terms, a *WELL*-PROVED IRON ORE ROYALTY in the NORTH OF IRELAND, in a most eligible situation for railway and for port of shipment. No machinery or pumping required. The ore is aluminous, free from phosphorus, and is valued for its purity and fluxing properties. The analysis shows a net product of 25 per cent. metallic iron. It has been tested in the blast-furnace, and a contract since entered into for the supply of 1000 tons, which is now in course of delivery.

For terms and further particulars, apply at once to Mr. SAMUEL ISHERWOOD, 11, Manchester-road, Southport, Lancashire.

VALUABLE AND EXTENSIVE FREEHOLD MINING PROPERTY FOR SALE, situate in one of the RICHEST MINING DISTRICTS in the Kingdom, surrounded by Mines that have yielded enormous profits for very many years, a large number of the rich lodes of which pass through the property offered. Terms very moderate.

Would suit private parties for investment, or could with great advantage be made into one or several very attractive public companies (particularly at the present time), as there would be no rents or royalties payable on the returns—a most unusual thing—and a great saving in the working of the Mines. Reports by several of the most eminent practical authorities exceedingly favourable, which can be seen.

Address, for further particulars, Messrs. HANCOCK, SHARP, and HALES, 71, King William-street, London, E.C.

RE WM. WEBB AND CO.—*IN LIQUIDATION.*

COBALT AND NICKEL REFINERS,

WAINWRIGHT STREET, ASTON.

FOR SALE, BY PRIVATE CONTRACT, THE ABOVE OLD-ESTABLISHED BUSINESS

The Premises are admirably adapted to the purposes required, no expense having been spared in erections and necessary plant, which includes all the latest inventions and improvements.

Stock-in-trade and loose plant only to be taken at a valuation.

The Premises are leasehold, with power to purchase the freehold at a fixed sum at any time previous to the expiration of the lease.

For further particulars, apply to the Trustee, Mr. JOHN LEWIS, Chartered Accountant, 11, Temple Row West, Birmingham.

RAILWAY WAGONS.

FOR SALE,—FIFTY SECOND-HAND 8-ton WAGONS built to a first-class specification, and now in thorough repair.

For particulars as to price, and to inspect the wagons, address "E. M.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

FOR SALE OR HIRE, ONE HUNDRED to TWO HUNDRED or MORE 3½ and 4-yard END TIP WAGONS; also several 8 in. and 13 in. cylinder TANK LOCOMOTIVES, and other CONTRACTOR'S PLANT, equal to new.

Apply, JOHN DICKSON, Jun., or A. C. BETTS, New North Works, Bootle, near Liverpool.

FOR SALE, FORTY SHARES in MOUNT'S BAY CONSOLS (7s. 6d. paid), price 2s. 6d.

Apply to "Alpha," *Chronicle* Office, Stratford-on-Avon.

SPARE MACHINERY AND MATERIALS FOR SALE, BY PRIVATE CONTRACT, at GOOLE PELLAS MINES, St. Ives, Cornwall.

ONE 40 in. PUMPING ENGINE, new cylinder, spring ring, &c., with or without BOILERS.

ONE 30 in. STAMPING ENGINE, wrought-iron shaft, TWO FLY-WHEELS.

ONE 24 in. WINDING ENGINE, complete; and a 22 in. ditto.

Sundry BOILERS, in first-class condition, from 11 tons down to 7 tons.

Large balance and angle bobs, nearly new; new and lofty shaft tackles; dry tubes; 200 fms. of 3¾ mild steel wire rope—new from maker, never used; a large quantity of pitwork, from 10 in. down to 6 in.; new plunger poles, from 10 in. down to 7 in.; strapping plates, various sizes; a large quantity 2 ft. shieves; and other materials in general use in mines.

For particulars and prices, apply to Capt. BUGELHOLE, West Providence Mines, St. Ives, Cornwall.—Dated May 2, 1881.

FOR SALE, a 30 H.P. PORTABLE STEAM ENGINE; with link-motion reversing gear, has drum and gearing complete for winding and pumping.

A 14 H.P. PORTABLE WINDING and PUMPING ENGINE.

Also a 6 H.P. PORTABLE HOISTING ENGINE.

Apply to—

BARROWS AND STEWART, ENGINEERS, BANBURY.

PAIR OF PUMPING ENGINES, coupled, ¼ in. centres, cylinders 13 in., stroke 24 in. Second-hand, in good condition.

Apply to JOHN CROWLEY and Co., Meadow Hall, near Sheffield.

TO MINING ENGINEERS.

AN AMERICAN MINING ENGINEER, enjoying a large practice in California, Nevada, Idaho, Utah, Colorado, Arizona, Mexico, and New Mexico, DESIRES to EFFECT an ARRANGEMENT with an English Mining Engineer, having an office in London, to TAKE ORDERS for the EXAMINATION OF MINES in the above-named States and Territories.

Address, ALEX. DEL MAR, 114, Gresham House, London, E.C.

STOCKS AND SHARES.

FOREIGN BONDS, RAILWAYS, TRAMWAYS, GAS, INSURANCE IRON, COAL, and MISCELLANEOUS SHARES.

Prices, with reliable information, forwarded on application to—

MESSRS. H. R. LEWIS AND CO.

BARTHOLOMEW HOUSE,

BARTHOLOMEW LANE,

LONDON, E.C.

SPECIAL INFORMATION in the SELECTION of MINING SECURITIES. The "MONTHLY INVESTMENT LIST" and the "WEEKLY PRICE LIST." may be had on application.

MR. CHARLES WILLIAMS, MINING ENGINEER AND SURVEYOR, DOLE HOUSE, TALIESIN, R.S.O., is at all times in POSITION TO FURNISH CAPITALISTS with RELIABLE INFORMATION in the SELECTION of MINING PROPERTIES in CARDIGANSHIRE and NORTH WALES. Investors will do well to consult the above before laying out money in the districts named.

MR. P. S. HAMILTON (late Chief Commissioner of Mines for the Province of Nova Scotia), PRACTICAL GEOLOGIST, MINING AGENT, and MINING ENGINEER, HALIFAX, NOVA SCOTIA.

PURCHASES and SALES of MINING PROPERTY effected, with careful regard to the interests of clients.

68, HUNTER STREET, SYDNEY.

FRANCIS AND RICHARDS, CIVIL AND MINING ENGINEERS AND SURVEYORS.

Colonial Mining Properties, Metals or Minerals examined or reported on. Terms moderate.

References in England: Messrs. JOSEPH MATTHEWS and Co., Engineers and Ironfounders, Tavistock, Devon.

CARTER AND CO., STOCK AND SHARE DEALERS, 8, UNION COURT, OLD BROAD STREET, LONDON,

Know of two or three Mines well situated and well managed, having abundance of mineral, which they can strongly recommend to intending investores for a substantial rise, and for good dividends.

Those desirous of making a good investment will do well to write to CARTER and Co. for particulars.

MR. THOMAS THOMPSON, JUN., STOCK BROKER, 16, ST. SWITHIN'S LANE, E.C.

Mr. THOMPSON transacts business in every species of Stock Exchange and Mining Securities.

Mr. THOMPSON affords reliable information to investors, and can give when desired, a list of first-class Stocks and Shares, yielding 4 to 10 per cent. dividend upon present prices.

Mr. THOMPSON'S weekly Circular may be had on application.

MESSRS. THOMPSON AND SON, STOCKBROKERS, PLYMOUTH, have for sale the undermentioned shares, for which offers are requested for any portion:—100 West of England Peat Company; 50 Devonport and Tiverton Brewery; 50 Tin Hill Mine; 50 Fortescue Stannagwyn; 75 Lomax, Old Wheal Rose, 10 per cent. div.; 25 West Pateley Bridge; 10 Roman Gravels; 75 New Penrose, 12s. 6d. paid; 50 ditto, fully paid; 50 Frongoch; and numerous others, a list of which can be had on application.

MESSRS. J. TAYLOR AND CO., MINING ENGINEERS AND INSPECTORS, 86, LONDON WALL, LONDON, E.C.,

Have Agents in the various Mining Districts of Great Britain, the Continent, Australia, and the United States of America.

Inspections undertaken, either personally or by our Agents, and Reports or Advice as to Working given.

JOSEPH RICHARDS, M.E.,

Late of the Devon Great Consols, England. Late Mineral Agent for the Earl Fortescue, England. Thirty-one years' experience; eleven years on the Pacific Coast.

JOHN TREGLOAN, M.E.,

Forty years' experience in England and the United States.

THE PACIFIC COAST MINE AGENCY AND MINING PROTECTIVE ASSOCIATION,

22, GEARY STREET,

SAN FRANCISCO, CAL.

CALIFORNIAN AND EUROPEAN AGENCY.

500, MONTGOMERY STREET SAN FRANCISCO, CAL.

J. JACKSON Manager

NOBEL'S DYNAMITE

Manufactured and sold by

NOBEL'S EXPLOSIVES COMPANY (LIMITED), 149, West George Street, Glasgow.

AGENTS EXPORT: J and G THORNE, 85, GRACECHURCH STREET, LONDON, E.C.
FACTORIES--ARDEER WORKS, STEVENSTON, AYRSHIRE.
WESTQUARTER WORKS, POLMONT STATION, STIRLINGSHIRE.

THE COTTON POWDER COMPANY (LIMITED)

RECOMMEND TO CONTRACTORS, MINERS, PIT SINKERS, QUARRYMEN, AND OTHERS, THEIR

TONITE, OR COTTON POWDER,

AS BEING THE SAFEST, CHEAPEST, AND STRONGEST OF ALL EXPLOSIVES.

TONITE is the most efficient and economical blasting agent ever invented, and is largely in demand. It does not contain any Nitro-glycerine, and is, therefore, exempt from the dangers of exudation, or of freezing and its attendant process of thawing.

The Company also manufacture PATENT DETONATORS of a quality much superior to the foreign article. The trade supplied on favourable terms.

OFFICES:

23, QUEEN ANNE'S GATE, LONDON, S.W.

WORKS: FAVERSHAM, KENT.

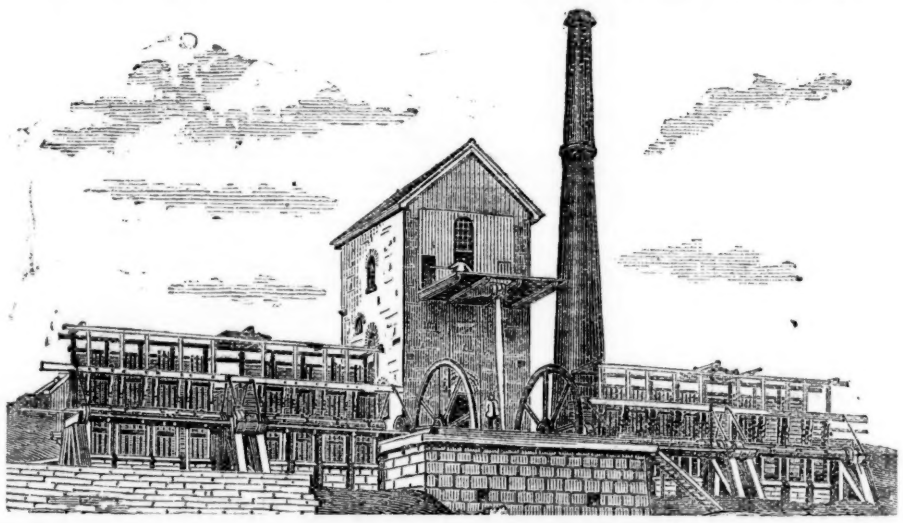
Agents DINEEN, SON, and Co., Leeds; DAVID BURNS, Haltwhistle; R. J. CUNNACK, Helston, Cornwall; J. and W SMITH, Chapel-en-le-Frith; W VEITCH, Jedburgh, N.B.; W HARRISON, Barrow-in-Furness.

THE TUCKINGMILL FOUNDRY COMPANY,

(TUCKINGMILL FOUNDRY AND ROSEWORTHY HAMMER MILLS),

CAMBORNE, CORNWALL,

Engineers, Iron and Brass Founders, &c.



REGISTERED TRADE MARK. MANUFACTURERS OF EVERY DESCRIPTION OF REGISTERED TRADE MARK.

T. F. Co.

PUMPING, WINDING, AND STAMPING ENGINES

ALL KINDS OF

MINING MACHINERY, SHOVELS, AND MINERS' TOOLS;

ALSO OF

BLAKE'S STONE BREAKERS.

T. F. Co.

ESTIMATES GIVEN UPON INDENTS AND SPECIFICATIONS.

ILLUSTRATED CATALOGUES POST FREE ON APPLICATION

LONDON OFFICE: 85, GRACECHURCH STREET,. E.C.

GOLD MEDAL AWARDED, PARIS EXHIBITION 1878.

THOMAS TURTON AND SONS,

MANUFACTURERS OF

MINING STEEL of every description.

CAST STEEL FOR TOOLS. CHISEL. SHEAR. BLISTER. & SPRING STEEL

MINING TOOLS & FILES of superior quality.

EDGE TOOLS, HAMMERS, PICKS, and all kinds of TOOLS for RAILWAYS, ENGINEERS, CONTRACTORS, and PLATELAYERS LOCOMOTIVE ENGINE, RAILWAY CARRIAGE and WAGON SPRINGS and BUFFERS.

SHEAF WORKS AND SPRING WORKS, SHEFFIELD.

LONDON OFFICES—90, CANNON STREET, E.C. PARIS DEPOT—12, RUE DES ARCHIVES. BOSTON MASS., U.S.—40, KILBY STREET.

For Excellence and Practical Success of Engines.

Represented by Model exhibited by this Firm.

HARVEY AND CO.,

ENGINEERS AND GENERAL MERCHANTS

HAYLE, CORNWALL

LONDON OFFICE.—186, GRESHAM HOUSE, E.C

MANUFACTURERS OF

PUMPING and other LAND ENGINES and MARINE STEAM ENGINE of the largest and most approved kinds in use, SUGAR MACHINERY MILLWORK, MINING MACHINERY, and MACHINERY IN GENERAL

SHIPBUILDERS IN WOOD AND IRON.

MANUFACTURERS OF

HUSBAND'S PATENT PNEUMATIC STAMPS

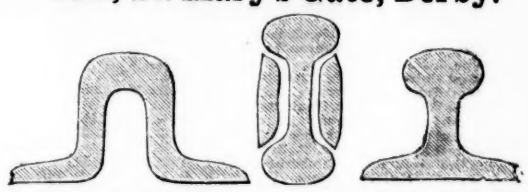
SECOND-HAND MINING MACHINERY FOR SALE,

IN GOOD CONDITION, AT MODERATE PRICES—viz.

PUMPING ENGINES; WINDING ENGINES; STAMPING ENGINES STEAM CAPSTANS; ORE CRUSHERS; BOILERS and PITWORK of various sizes and descriptions; and all kinds of MATERIALS required for MINING PURPOSES.

JOHN BEATSON AND SON,

40h, St. Mary's Gate, Derby.

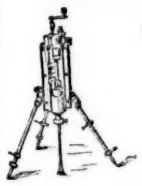


IRON AND STEEL RAILS, of all sections, from 10 to 86 lbs. per yard, new perfect, new slightly defective, or second-hand, with Fish-plates, Bolts and Nuts, Chairs, Spikes, and Points and Crossings to match, when required.

STEEL AND IRON WIRE ROPES, LOCOMOTIVE ENGINES, &c., &c.
BARS, PLATES, SHEETS, &c.
STEEL OF ALL KINDS. PIG IRON OF ALL KINDS
Delivered at all Railway Stations and Ports in Great Britain.

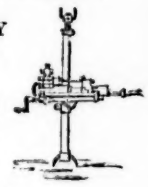
DUNN'S

IMPROVED ROCK DRILL.



This DRILL is GREAT STRENGTH and SIMPLICITY SECOND TO NONE IN THE KINGDOM.

We are prepared to SUPPLY our well known MACHINES at greatly REDUCED PRICES—from £35, according to calibre of cylinder



ESTIMATES GIVEN FOR PLANTS, &c., &c

Dunn's Patent Rock Drill Company

(LIMITED),

OFFICE,—193, GOSWELL ROAD,

LONDON, E C.

C. H. WALKER AND CO.,

MINING AGENTS AND ENGINEER,
VALPARAISO AND SANTIAGO,
CHILE

MEXICO, NEW MEXICO ARIZONA, UTAH, NEVADA AND CALIFORNIA.

F. M. F. CAZIN,

MINING AND CIVIL ENGINEER,

At BERNALLILLO, NEW MEXICO, U.S. OF AMERICA.

Has 24 years' experience in Mining and Smelting, and 10 years experience of American Business and Law, offers his services at moderate chargesfor Reporting on Mining and other Property in any of the above-named States or Territories gives correct, safe, and responsible advice as to securing full titles and possession and, as to best mode of utilising the property, will assist in settling existing difficulties by compromise, and in disposing of developed mining property when held at real value; offers his assistance for securing undeveloped mining properties at home prices. As to care taken in reporting, reference is made to the *Mining Journal* Supplement, April 1, 1876, containing a report on property of the Maxwell Land Grant and Railway Company; as to technical standing, to the prominent men of the trade—compare *Mining Journal* of Aug. 30 and Nov. 31, 1872, and *New York Engineering and Mining Journal*, Feb. 28, 1874.

TO ENQUIRERS.—Having received numerous letters asking for my gratuitous opinion on mining properties, I beg to state that I cannot afford time to answer letters of that description without the inclosure of a fee —a t least of a half-a-guinea. R. SYMONS.
Truro, June 15.

THE MINING RECORD. Only $3·00 a year.
61, BROADWAY, NEW YORK.
Is the ONLY PAPER in the United States that gives FULL LATEST ACCOUNTS from all the GREAT GOLD, SILVER, IRON, and COAL MINES of AMERICA.
ORDERS EXECUTED FOR MINING STOCKS. Information free
ALEX. ROBT. CHISHOLM, Proprietor.
London Office—H. J. CHAWNER, Manager, 3, Catherine-street, Strand, W

Second Edition. Just Published, price 2s. 6d.

A NEW GUIDE TO THE IRON TRADE OR MILL MANAGERS' AND STOCK-TAKERS' ASSISTANT;
Comprising a Series of New and Comprehensive Tables, practically arranged to show at one view the Weight of Iron required to produce Boiler-plates, Sheet-iron and Flat, Square, and Round Bars, as well as Hoop or Strip Iron of any dimensions. To which is added a variety of Tables for the convenience of merchants, including a Russian Table.
BY JAMES ROSE.
Batman's Hill Ironworks, Bradley, near Bilston.

OPINIONS OF THE PRESS.

"The Tables are plainly laid down, and the information desired can be instantaneously obtained."—*Mining Journal.*
"900 copies have been ordered in Wigan alone, and this is but a tithe of those whom the book should commend itself."—*Wigan Examiner.*
"The Work is replete on the subject of underground management."—M. BANEK Colliery Proprietor.
To be had on application at the MINING JOURNAL Office, 26, Fleet-street, London.

Just published.

THE NORTH WALES COAL FIELD
Being a series of Diagrams showing the Depth, Thickness, and Local Names of the Seams in the principal Collieries of the various districts, with Index, Geological Map, and horizontal sections across the Ruabon, Brymbo, Buckley, and Mostyn districts.
By JOHN BATES GREGORY and JESSE PRICE,
of Hope Station, near Mold, Flintshire.
Price: Mounted on holland, coloured and varnished, and fixed on mahogany rollers, 30s. each; or in book form, 12×9, mounted and coloured, 25s. each.
May be obtained, by order, of all Booksellers or direct from the MINING JOURNAL Office, 26, Fleet-street, London, E.C., upon remittance of Post Office Order for the amount.

Just published, cloth limp, price 1s. 6d.,

THE COLLIERY READY-RECKONER AND WAGES CALCULATOR.
By JAMES IRELAND
"Will be the means of preventing many disputes between pay clerks and colliers."—*Mining Journal*
To be had on application at the MINING JOURNAL Office, 26, Fleet-street, E.C.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.		Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
3939	Blue Hills *t, c,* St. Agnes	4 6	6... 3 ...	2¾ 3 ...	0 4 0...	0 2 0	...May 1881
6000	Caron *t,* Cardigan*	2 0	0... 2 ...	1 2 ...	0 4 0...	0 2 0	...Oct. 1878
6000	Carn Brea, *c, t,* Illogan†	9 7	11... 24¼...23½	24 ...	51 11 8...	0 5 0	...Apr. 1881
1240	Devon Gt. Consols, *c, a,* Tavistock*†	1 0	0... 10 ...	8½ 9½...	118 7 0...	0 6 0	...Dec. 1880
4296	Dolcoath, *c, t,* Camborne	10 14	10... 66 ...	65 66 ...	121 11 3...	1 0 0	...May 1881
6400	East Pool, *t, c,* Illogan	0 9	9... 37¼...37½	38 ...	23 17 9...	1 0 0	...May 1881
12500	Frongoch,* *l,* Cardgn (11000 sh.iss.	2 0	0... 4 ...	3 4 ...	0 4 0...	0 2 0	...Jan. 1881
4 000	Glasg. Car., *c* [30000sh. £1 pd., 10000	15s. pd.]	1¼...	⅞ 1½ ...	0 13 10...	0 0 6	...Aug 1878
8500	Gorsedd and Merllyn Con., *l,* Flint.	2 10	0... 3 ...	3 3½ ...	0 5 0...	0 5 0	...Aug. 1877
1 000	Great Laxey, *l,* Isle of Man*†	4 0	0... 19 ...	18 19 ...	27 6 0...	0 6 0	...July 1881
6400	Green Hurth, *l,* Durham*	0 6	0... 7½...	7 7½ ...	2 18 0...	0 2 0	...Dec. 1880
20000	Grogwinion, *l,* Cardigan*	2 0	0... 3 ...	2 3 ...	0 16 4...	0 1 6	...July 1880
10240	Gunnislake (Clitters), *t, c*‖	2 2	0... 3¾...	3 3¼ ...	0 15 9...	0 1 0	...Mar. 1881
2800	Isle of Man, *l,* Isle of Man*	25 0	0... — ...	...	83 5 0...	1 0 0	...Sept. 1880
20000	Leadhills,* *l,* Lanarkshire	6 0	0... 2¼...	2 2¼ ...	0 15 0...	0 3 0	...Mar. 1878
400	Lisburne,* *l,* Cardiganshire	18 15	0... — ...	...	609 10 0...	1 0 0	...June 1881
10000	Mclianear, *c,* Hayle*	2 0	0... 5 ...	4 4½ ...	1 8 0...	0 2 0	...July 1881
9300	Minera Mining Co., *l,* Wrexham*...	5 0	0... 9 ...	9 9½ ...	89 0 8...	0 1 6	...Feb. 1881
20000	Mining Co. of Ireland, *cl, c, l**	7 0	0... 2¼...	2 2¼ ...	24 0 0...	0 2 6	...Jan. 1880
8000	Mona,* *c,* Anglesea	5 0	0... 12 ...	11 11½ ...	0 10 0...	0 10 0	...July 1880
11829	North Hendre, *l,* Wales	2 10	0... 6 ...	5¾ 6 ...	3 12 6...	0 2 6	...May 1881
8146	Ditto	1 5	0... 3½...	3 3½ ...	0 8 6...	0 1 3	...May 1881
2000	North Levant, *t, c,* St. Just†	13 6	0... 4 ...	3 4 ...	4 16 0...	0 3 0	...Feb. 1881
5000	Penhalls, *t,* St. Agnes†	3 17	6... 2 ...	1¼ 1½ ...	3 17 0...	0 1 6	...Jan. 1881
6000	Pennant, *l, bar,* North Wales*	5 0	0... 5 ...	4 5 ...	0 10 0...	0 5 0	...Mar. 1878
12000	Phœnix United, *t, c,* Link.	5 10	3... 4½...	4 4½ ...	17 0 0...	0 2 6	...Mar. 1880
18000	Pr. Patrick,* *s-l,* (als.12000pf.10 p.c)	1 0	0... — ...	...	0 18 6...	0 2 0	...July 1880
10000	Red Rock,* *l,* Cardigan	2 0	0... 2 ...	1 2 ...	0 4 0...	0 2 0	...Jan. 1878
12000	Roman Gravels, *l,* Salop*	7 10	0... 12½...	11½ 12½ ...	8 11 0...	0 5 0	...June 1881
4000	Rhydalun,* *l,* Wales	10 C	0... — ...	...	0 5 0...	0 5 0	...Feb. 1880
512	South Caradon, *c,* St. Cleer†	1 5	0... 45 ...	45 50 ...	749 0 0...	1 0 0	...July 1880
6123	South Condurrow, *t, c,* Camborne†...	6 5	6... 9¾...	9 9½ ...	8 7 0...	0 5 0	...Apr. 1881
9000	South Darren, *l,* Cardigan*	1 16	0... 1¾...	1½ 1¾ ...	0 4 0...	0 2 0	...Apr. 1880
4500	South Wheal Frances, *t,* Illogan†	7 12	4... 14¾...	14½ 14¾ ...	40 15 6...	0 10 0	...July 1880
110000	Tankerville Gt. Consols, *l,* Salop*†.	0 10	0... ¾...	½ ⅝ ...	0 16 3...	0 0 10	...Jan. 1877
6000	Tincroft, *c, t,* Pool, Illogan†§	11 10	0... 16¾...	16 16½ ...	50 13 6...	0 5 0	...Apr. 1881
15000	Van, *l,* Llanidloes*	4 5	0... 9 ...	8½ 9 ...	25 5 6...	0 2 6	...July 1881
3000	West Chiverton, *l,* Perranzabuloe†§	21 2	6... ⅜...	1 1¼ ...	55 10 0...	0 10 0	...Feb. 1878
512	West Tolgus, *c,* Redruth	95 10	0... 16 ...	15½ 16 ...	33 0 0...	1 0 0	...Jan. 1879
1200	West Wheal Seton, *c,* Camborne†§...	27 0	0... 22 ...	20 22 ...	223 0 0...	0 7 6	...Apr. 1878
6000	West Basset, *c,* Illogan†	7 0	4... 15¼...	14¼ 14¾ ...	27 12 0...	0 5 0	...July 1881
12000	Wheal Crebor, *c,* Tavistock	2 4	0... 3¾...	3¼ 3¾ ...	0 12 9...	0 2 6	...July 1881
1024	Wheal Eliza Consols, *t,* St. Austell..	18 0	0... — ...	...	42 10 0...	8 0 0	...Aug. 1880
6000	Wheal Grenville, *l,* Camborne	15 0	0... 8¼...	7½ 8 ...	0 7 6...	0 2 6	...Jan. 1881
4295	Wheal Kitty, *t,* St. Agnes	5 4	6... 2½...	2 2¼ ...	12 18 6...	0 1 6	...Jan. 1881
3000	Wheal Peevor, *t,* Redruth	7 11	0... 18½...	16 17 ...	7 18 6...	0 10 0	...Apr. 1881

FOREIGN DIVIDEND MINES.

35500	Alamillos, *l,* Spain*†	2 0	0... 1¾...	1¼ 1¾ ...	2 2 9...	0 0 9	...Mar. 1881
30000	Almada and Tirito Consol., *s*†	1 0	0... ⅜...	⅛ ⅜ ...	0 6 3...	0 1 0	...May 1876
20000	Australian, *c,* South Australia†	7 7	6... 1¾...	1¼ 1¾ ...	1 5 6...	0 2 0	...Aug. 1880
15000	Birdseye Creek, *g,* California*	4 0	0... 1⅞...	1¾ 1⅞ xd ..	0 18 0...	0 2 0	...June 1881
20000	Cape Copper Mining,*† South Africa	7 0	0.. 44 ...	42 44 xd...	42 7 6...	1 0 0	...May 1881
35000	Cesena Sulph. Co., Romagna, Italy*	10 0	0... — ...	...	1 1 0...	0 1 0	...Aug. 1879
50000	Copiapo, *c,* Chili* (£4 shares)	3 8	0... 2⅞...	2⅝ 2⅞ ...	1 13 9...	0 1 0	...May 1881
70000	English & Australian,*† *c,* S. Aust...	2 10	0... 1½...	1¼ 1½ ...	2 18 9...	0 1 0	...Mar. 1880
25000	Fortuna, *l,* Spain*†	2 0	0... 4¾...	4¼ 4¾ ...	7 17 2...	0 1 9	...Mar. 1881
60000	Frontino & Bolivia, *g,* New Gran.*†	2 0	0... 4¼...	3¼ 4¼ ...	0 8 0...	0 2 0	...Jan. 1881
200000	La Plata, *s-l,* Leadville†	2 0	0... 1¼...	1 1¼ ...	0 6 9...	0 0 0	...June 1881
15000	Linares, *l,* Spain*†	3 0	0... 6½...	5½ 6 ...	18 14 10...	0 4 0	...Mar. 1881
56000	New Quebrada, *c,* Venezuela†	5 0	0... 4½...	4 4½ ...	0 5 6...	0 3 0	...July 1881
1000	Ditto, Debentures	100	0 0... 101 ...	98 101 ...	6 per cent.		
3000	Oregon, *g,* Oregon, U.S. (pref. sh.)	4 0	0... — ...	...	0 2 6...	0 2 6	...Dec. 1880
20000	Panulcillo, *c,* Chili*†	4 0	0... 6 ...	5½ 6 ...	0 13 3...	0 0 4	...Apr. 1881
25000	Pitangui,* *g,* Brazil (in. 6000 £1 pd).	0 10	0... — ...	...	0 1 0...	0 1 0	...Sept. 1880
10000	Pontgibaud, *s-l,* France†	20 0	0... 15 ...	13 15 ...	28 17 6...	0 7 3	...Dec. 1880
100000	Port Phillip, *g,* Clunes*†(£2 shares)	1 0	0... ½...	¼ ½ ...	1 14 2...	0 0 10	...Feb. 1881
24000	Richmond Consol., *s,* Nevada*†	5 0	0... 16¼...	15½ 16 ...	12 1 6...	1 0 0	...June 1881
158880	Rio Tinto,*c, Sp.Coup.Bds.,Huelva.	100	0 0... 102 ...	100 102 ...	5 per cent.		...July 1880
25000	Ditto, shares	10 0	0... 20 ...	19 20 ...	0 18 0...	0 8 0	...Nov. 1880
40000	Santa Barbara,* *g,* Brazil	0 10	0... 2 ...	1¾ 2 ...	0 11 9...	0 1 0	...June 1880
120000	Scottish-Australian Mining Co.*†...	1 0	0... 1⅞...	1½ 1⅞ ...	15 p. cent.		...Nov. 1880
30000	Ditto, New	0 10	0... 1 ...	¾ 1 ...	15 p. cent.		...Nov. 1880
50000	Sentein,* *s-l, bl,* Ariège, France	1 0	0... 1¼...	1 1¼ ...	0 2 0...	0 2 0	...Jan. 1880
22500	Sierra Buttes, *g,* California*†	2 0	0... 1¾...	1¾ 1⅞ ...	2 1 6...	0 1 0	...Oct. 1880
10625	Ditto, Plumas Eureka	2 0	0... 2¼...	2½ 2¾ ...	2 10 0...	0 3 0	...Oct. 1880
213000	St. John del Rey*†(£5 Stock and multiples dealt in)...			215 225 ...	5 p.c. for half-year, Dec. 1880		
92566	Tharsis,* *c, sul,* Spain (31000s. 7*l*.p.)†	10 0	0... 43½...	42 43 ...	6 10 0...	2 10 0	...June 1881
20000	Tolima,* *g, s,* Colombia	5 0	0... — ...	...	1 16 6...	0 4 0	...Apr. 1881
25000	Victoria* (London), *g,* Australia ...	1 0	0... — ...	...	0 13 10...	0 0 0	...Feb. 1881
15000	Western Andes, *s,* Colombia	5 0	0... — ...	...	2 18 0...	0 0 2	...Aug. 1880
2100	W. Prussian (5500 pref. sh. £10 pd.)	10 0	0... 10½...	10 10½ ...	4 2 0...	0 8 0	...Apr. 1881

§ Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares.		Paid.	Last wk.	Clos pr.
30000	Alston United,* *l,* Cumberland	1 0	0...	1½...
12000	Assheton, *l,* Carnarvonshire*	5 0	0...	¾... ½ ¾
10000	Atlantic,* *c, l* (res. shares 28,000)	1 0	0...	1¼...1⅝ 1¾
36000	Basset & Buller Cons.,* *c. t,* Illogan.	1 0	0...	— ...
11583	Bedford Unit.,* *c,* Tavis.(£1 liab.)...	0 8	0...	1⅞... 1⅝ 1⅞
8000	Blaen Caelan,* *l,* Cardigan	3 0	0...	— ...
30000	Blackburnbanks & Gildersdale, *l*	0 5	0...	⅜... ¼ ⅜
30000	Bodidris,* *l, bl,* Denbighshire	1 0	0...	1 ... ¾ 1¼
30000	British,* *s-l, bl,* Wrexham	1 0	0...	— ... 1 1⅛
20000	Bwlch United,* *l,* Cardigan	0 17	6...	3¼... 2¾ 3
25000	Callington Consols*, *t*	2 0	0...	2¼... 2 2¼
50000	Cambrian,* *s-l, c,* Cardiganshire	2 0	0...	— ...
6000	Carn Camborne, *t, c,* Camborne	0 8	0...	3¼... 3¼ 3¼
20000	Carnarvon,* *c,* Carnarvonshire	1 0	0...	1⅛... ⅞ 1⅛
6000	Cathedral Cons., *c, t,* Gwennap	0 5	0...	1¼ .. 1 1¼
20000	Central Foxdale, *l,* I. of Man (2*l*. sh).	1 17	6...	— ...
25000	Coed-y-Fedw&Pant-y-Buarth,*l,*Mold	1 0	0...	1¼... 1 1⅛
2450	Cook's Kitchen, *t,* Illogan†	30 4	9...	16½...17 17½
15500	Court Grange United*, *s-l*	1 0	0...	— ...
6400	Crook Burn,* *l,* Cumberland	0 12	6...	⅞... ¾ ⅞
14000	Crosswood Mining Lands, *l**	1 0	0...	1¼... ¾ 1¼
45000	D'Eresby Mountain, *l, bl,* Llanrwst.	0 10	0...	3 ... 2 3
20000	Denbighshire Consolidated,* *l*	3 0	0...	2¼... 2 3
12000	Derwent,* *l,* Durham	4 0	0...	1¼...1 1½
1000000	Devon,* *c, bl,* Tavistk. (151652 iss.)	0 1	0...	1s.4d... 1s. 4d.
60000	Devon Friendship,* *c,* Tavistock	1 0	0...	1⅜...1¼ 1½
12000	Devon Great United* (2*l*. shares)	1 0	0...	1¼...1½ 1¾
20000	Devonshire,* *s-l,* Lydford	1 0	0...	1½...
50000	Drakewalls,* *t, c* Calstock	1 0	0...	1½... 1¼1⅜
10000	Dubby Syke, *l,* Durham*	1 0	6...	¾... 3/16 ⅝
12000	East Blue Hills, *t,* St. Agnes	0 5	0...	⅜... ½ ⅝
6000	East Botallack, *t,* St. Just	0 8	0...	1¼...1¼ 1¾
6144	East Caradon, *c,* St. Cleer†	3 19	6...	¾... ⅝ ¾
4000	East Chiverton, *l,* Perranzabuloe ...	10 4	9...	2¼...1½ 2
30000	E. Craven Moor,* *l.* Pateley Bridge	1 0	0...	1 ... ⅝ ⅞
12000	East Crebor, *c,* Tavistock	0 10	0...	⅜... ¼ ⅜
15000	East Devon Cons.,* *c,* Buckfastligh.	2 0	0...	3 ...
30000	East Herodsfoot, *s-l,* Liskeard	1 0	0...	1½... 1¼ 1½
20000	East Long Rake,* *l,* Wales	1 0	0...	1⅛...
21000	East Roman Gravels,* *l,* Salop	0 15	0...	1⅛... ⅞ 1⅛
18000	East Van, *l,* Llanidloes*	5 0	0...	1⅜... 1⅛ 1⅜
4096	East Wheal Buller, *t, c,* Gwennap..	0 10	0...	¾...
2096	East Wheal Lovell, *t,* Helston	15 3	6...	2 ...1½ 2
100000	East Wheal Rose,* *s-l,* Newlyn East	1 0	0...	1½...
10000	Fortescue (Stannagwyn,)* *var*	1 0	0...	2½...
12000	Gawton,* *c,* Tavistock (2*l*. shares)..	1 14	0...	1 ... ⅞ 1
14000	Glenroy,* *s-l,* Isle of Man	4 0	0..	½... ¼ ½
30000	Gobbett,* *t,* Dartmoor	1 0	0...	1½...1⅝ 1¾
10000	Goddards,* *l, b,* Carnarvon	1 0	0...	1¾...1⅛ 1¼
25000	Goodevere, *t,* St. Cleer	1 0	0...	1¼...1⅛ 1¼
20000	Griffin,* *s-l,* Carnarvon	1 0	0...	— ...
20000	Great Dyliffe* (10000 sh. issued) ...	1 0	0...	1½... ⅞ 1⅛
12000	Great Holway,* *l,* Flintshire	5 0	0...	5½... 5 5⅛
100000	Great Polgooth United,* *t*	1 0	0...	1¼... 1 1¼
6000	Great West Chiverton, *l,* St. Agnes.	0 5	0...	⅜... ¼ ⅜
10000	Gwern-y-Mynydd,* *s-l,* Flintshire..	4 0	0...	1¼... 1 1⅛
70000	Gwydyr Amal.* *l, bl,* Carnarvon ...	1 0	0...	¾... ½ ¾
6400	Harwood,* *l,* Durham	1 0	0...	1s. ...
12000	Herodsfoot, *l,* near Liskeard†	0 12	9...	¾... ⅝ ¾
18000	Hingston Down, *c,* Calstock*†	0 12	0...	1¼... 1 1¼
20000	Kirkmichael,* *l* (2000 unissued) ...	1 0	0...	1¼... 1 1¼
6000	Killifreth, *t,* Chacewater	4 0	0...	½... ¼ ½
25000	Kit Hill Gt. Cons.*c, *ars-m,* (2*l*. sh.)	0 15	0...	1½... 1 1⅛
15000	Lady Ann, *s-l,* Llanarmon	1 0	0...	1½... ⅞ 1⅛
30000	Lady Ashburton,* *s,* Callington ...	1 0	0...	1⅛...1⅜ 1⅝
15000	Lady Bertha,* *c,* Tavistock	1 0	0...	— ...
2500	Levant, *c, t,* St. Just	11 10	0...	1⅝... 1½ 1⅝
15000	Llandegla,* *l,* Wales	1 0	0...	1⅛... ⅞ 1⅛
10000	Lomax,* *s-l,* Helston	1 0	0...	1¼... 1 1¼
5120	Lovell, *t,* Wendron	0 16	0...	1½...1¼ 1½
9000	Marke Valley, *c,* Linkinhorne†	6 4	6...	1¼... 1 1¼
6000	Medlyn Moor, *t,* Wendron	3 15	10...	— ...
28000	Mid-Devon,* *c* (& 17000, 3s. 4d. pd.)	0 6	8...	— ...
20000	Mona Consols,* *c,* Anglesea	1 0	0...	1¼... 1 1¼
15000	Monkstown,* *man,* Devon	2 0	0...	2⅜...
20000	Mostyn Consols,* *s-l,* Flint	1 0	0...	— ...
10000	Mynydd Gorddu, *l,* Cardigan*	4 0	0...	4 ... 3½ 4
25000	Moray Firth (18000 issued)	2 0	0...	— ...
12000	Morfa Du, *z, g, s,* Anglesea*	1 0	0...	⅞... ¾ ⅞
6144	Mount Carbis, *t, c,* Redruth	1 0	0...	3½...3¼ 3½
2400	New Cook's Kitchen, *t,* Illogan	7 14	0...	6½... 6 6½
8000	New Dolcoath, *t, c,* Camborne*	3 0	0...	— ...
10000	New Holmbush,* *t, c,* Callington ...	2 0	0...	— ...
6000	New Kitty, *t,* St. Agnes	0 8	0...	1⅞...1½ 1⅞
12000	New Penrose,* *t, c,* Helston (1*l*. sh).	0 10	0...	1¼... 1 1¼
3500	New Tincroft,* *t,* Lelant	8 0	0...	½... ¼ ½
2000	New Trumpet. *t,* Wendron	0 10	0...	3 ... 2½ 3
12000	New West Caradon, *c,* Liskeard	0 1	9...	⅜... ⅛ ⅜
3000	New Wheal Peevor, *t,* Redruth	0 10	0...	2¼...1¼ 2¼

NON-DIVIDEND MINES—*continued.*

Shares.		Paid.	Last wk.	Clos pr.
35000	New Wye Valley, *l,* Montgomery.*	1 0	0...	1 ... ¾ 1
20000	North Alfred, *c,* Phillack	0 10	0...	1¾...
5328	North Busy, *t, c,* Blackwater	0 10	8...	½...
10000	N. D'Eresby Mount..* *l, bl,* Carnarv.	1 0	0...	1¼... 1
12000	North Herodsfoot, *l,* Liskeard	0 6	6...	⅜... ⅛ ⅜
50000	North Molton,* *c, mn, z,* Devon	1 0	0...	— ...
6000	North Penstruthal, *t, c,* Gwennap..	1 14	6...	2 ... 1¾ 2
2936	North Treskerby, *c,* St. Agnes	8 17	10...	— ...
8000	Northern,* *l,* Durham	1 0	0...	1¾... 1⅝ 1¾
40000	Okel Tor,* *t, c, a,* Calstock	1 0	0...	1¼... 1 1⅛
80000	Old Shepherds *s-l,* Cornwall	0 5	0...	⅜...
12000	Pandora,* *l,* Carnarvon	2 0	0...	¾... ½ ¾
11612	Pant-y-Mwyn,* *l,* Mold	2 0	0...	2⅛... 2 2⅛
45000	Parys Corporation,* *c,* Anglesea ...	1 0	0..	⅞... ¾ ⅞
7500	Pateley Bridge, *l,* Yorkshire	1 0	0...	⅜...
6000	Pedn-an-drea, *t,* Redruth	1 17	0...	4 ... 3¾ 4
12000	Pelyn Wood, *c,* Lanivery	0 5	0...	¾... ½ ¾
600	Pendarves United, *c,* Camborne	8 0	0...	2½... 2 2½
30000	Penhale and Barton, *t,* St. Columb	1 0	0...	1¼... 1 1⅛
12000	Pen-yr-Orsedd,* *l,* Flintshire	1 0	0...	1⅛... 1 1⅛
15000	Perran Consols,* *s-l*	1 0	0...	1⅛... 1 1⅛
100000	Pioneer,* *var.* Wales	1 0	0...	— ...
10000	Polrose, *t,* Cornwall	0 12	0...	1 ... ⅝ 1
10000	Port Nigel,* *s-l,* Carnarvonshire ...	2 0	0...	2 ... 1¾ 2
6000	Prince Royal, *t, c, s-l,* St. Agnes ...	1 0	6...	1¾... 1⅝ 1¾
12000	Prince of Wales, *c, s,* Calstock	0 10	0...	⅞... ¾ ⅞
30000	Silver Hill,* Callington	0 10	0...	1¼... ¾ 1
40000	Sortridge,* *c,* Horrabridge	1 0	0...	1¼... 1 1⅛
50000	So. Cambrian,* *l,* Cardiganshire ...	1 0	0...	1¼... 1 1⅛
30000	South d'Eresby Mountain,* *l*	1 0	0...	1⅛...
35000	So. Devon Unit.,* *c,* Buckfastleigh.	1 0	0...	1¼... 1 1⅛
6000	South Penstruthal, *t, c,* Gwennap...	1 7	6...	⅜... ⅛ ⅜
6000	South Roskear, *t, c,* Camborne	8 5	0...	— ...
6000	South Tolcarne, *t, c,* Camborne	4 6	6...	2 ...1⅜ 2
40000	South Wheal Crebor*, *c,* Tavistock..	1 0	0...	1¼... 1 1⅛
2043	South Wheal Crofty, *c,* Illogan	18 17	0...	9 ... ⅛ 9
4000	St. Just United, Cornwall	3 5	0...	— ...
40000	Tamar, *s-l,* Bearalston*	1 0	0...	1⅞...1⅝ 1⅞
6400	Teesdale,* Durham (pref.)	1 0	0...	⅜... ¼ ⅜
20000	Tin Hill,* St. Stephens..	1 0	0...	2¼... 2 2⅛
10000	Temple,* *l,* Cardigan	1 0	0...	1⅛... 1 1⅛
12000	Trebartha Lemarn, *t,* Callington ...	0 0	6...	⅝... ⅛ ⅝
12000	Trevince Consols, *t, c,* Gwennap ...	0 5	0...	1¼... 1 1⅛
6000	Trugo, *c,* St. Columb	0 8	0...	1⅛...1⅛
10000	Tyn-y-Fron,* *l,* Cardiganshire	1 0	0...	1¼... 1 1⅛
35000	Un.Van & Glyn,*l, (& 17500 pref. sh)	1 0	0...	⅜... ⅛ ⅜
1000	Vaughan,* *l,* Cardiganshire	10 0	0...	— ...
15000	Vincent,* *t,* Altarnum	1 0	0...	1¼... 1 1⅛
20000	Walkham United,* *t, c,* Tavistock...	1 0	0...	1⅛... 1 1⅛
12000	West Assheton, *l,* Carnarvon	1 0	0...	2 ... 1⅞ 2
12000	West Caradon, *c,* St. Cleer	0 5	9...	1¼... 1 1⅛
3000	W. Craven Moor, *l,* Pateley Brdge*	10 0	0...	— ...
12000	West Crebor, *c,* Tavistock	0 5	0...	⅜... ⅛ ⅜
10240	West Devon Consols, *c,* Calstock ...	1 0	0...	1⅛... 1 1⅛
10000	West Godolphin, *t, c,* Breage	0 10	0...	2 ... 1⅞ 2
12000	West Holway,* *l,* Flintshire	1 0	0...	2 ... 1⅞ 2
6000	West Kitty, *t,* St. Agnes	0 12	0...	5 ... 5 5
20000	W. Lisburne,* *l, (1*l*. sh.)* Cardigan..	1 0	0...	1⅛... 1 1⅛
3000	West Mary Ann, *l,* Menheniot	1 5	0...	1⅛... ⅛ 1
30000	West Pateley Bridge,* *l,* Yorkshire.	1 0	0...	— ...
6000	West Polbreen,* *t, c,* St. Agnes	0 2	0...	1⅛...1⅛
5190	West Poldice, St. Day‡	5 10	0...	5 ... 5 5
10000	West Vor,* *t,* Helston	2 0	0...	2 ... 1⅞ 2
2048	West Wheal Frances, *t,* Illogan‡ ...	29 6	3...	12½...12¾ 12½
3000	West Wheal Peevor, *t,* Redruth ...	2 10	6...	15 ... 14⅞ 15
12000	West Wye Valley,* *l,* Montgomery.	3 0	0...	— ...
6000	Wheal Agar, *c,* Illogan‡	14 8	0...	13½...14 13⅝
6144	Wheal Basset, *c,* Illogan‡	5 8	0...	5 ... 4 5
3000	Wheal Boys, *t,* Redruth	0 16	0...	2½...2¾ 2½
12000	Wheal Coates United,* *t,* St. Agnes	0 17	6...	1⅞...1⅝ 1⅞
2585	W. Comf., & No. Tres., *t, c,* Gwennap	2 2	0...	3¾...3½ 3¾
50000	Wheal Elizabeth,* *t,* Cornwall	1 0	0...	⅞... ⅝ ⅞
5000	W. Fortune,* *s, c, ars,* Harrowbarrow	1 0	0...	— ...
15000	Wheal George,* *l, bl,* Carnarvon ...	1 0	0...	1⅛... 1 1⅛
12288	Wheal Jane, *t,* Kea‡	1 5	8...	⅝... ⅜ ⅝
12000	Wheal Jewell, *c,* St. Hilary	0 14	0...	⅜... ⅛ ⅜
25000	Wh. Hony and Trelawny, *s-l,* Lisk.	2 0	0...	2½... 2¼ 2½
12000	Wheal Lusky, *t,* Callington	0 0	7...	8⅜... 8⅛ 8⅜
2000	Wheal Owles, *t,* St. Just‡	7 3	0...	— ...
6000	Wh. Prussia, & Cardrew, *t, c,* Rdrth	1 10	0...	1⅛... 1 1⅛
12000	Wheal Russell, *c,* Tavistock	2 1	6...	— ...
6000	Wheal Sisters, *t,* Lelant	3 5	0...	2½... 2⅜ 2½
4096	Wheal Uny, *t, c,* Redruth	15 16	0...	2 ... 1⅞ 2
4000	Ystwith,* *l,* Cardigan	1 6	0...	1 ... ¾ 1

bl, blende; *c*, copper; *g*, gold; *l*, lead; *s*, silver; *sl*, slate; *s-l*, silver-lead; *t*, tin; *z*, zinc; *r*, iron; *a*, arsenic.
* Limited Liability Companies; † quoted on the Stock Exchange.
‡ have paid dividends.

NON-DIVIDEND FOREIGN MINES; FOREIGN AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE COMPANIES; GAS, IRON AND COAL, WAGON COMPANIES, &c.

NON-DIVIDEND FOREIGN MINES.

Shares.		Paid.	Clos. pr.
67000	Akankoo,* *g,* Gold Coast	0 5	0... ⅜ ½
64380	Anglo-African,*d, Kimberley, S.Af.	10 0	0...
10000	Arendal, *c,* Norway	4 0	0... 2¾ 3
120000	Asia Minor,* *s-l,* Lidjessy, Sivas ...	1 0	0...
30000	Blue Tent, *hyd,* California	5 0	0... 2 2¼
30000	Bratsberg,* *c,* Norway	2 0	0... 2¼ 2½
40000	Brazilian, *g,** Brazil	1 0	0... 1 1¼
200000	British Australian,* *g,* N. So. Wales	1 0	0...
10000	Buena Ventura,* *l,* Spain (fy.pd)...	2 0	0...
110000	California,* *g,* Colorado	1 0	0... 1⅛ 1¼
100000	Callao Bis,*g, Venezuela	1 0	0...
15000	Canada,* *g*	1 0	0...
82500	Canadian, *c, sul,** Canada†	4 0	0... 1¼ 1½
23000	Central Jagersfontein Diamond*...	5 0	0...
100000	Cherambadi (Wynaad) District,* *g.*	1 0	0...
500000	Chile,* *g,* Venezuela	1 0	0...
136505	Chontales, *g, s,* Nicar.*† (98000 iss)	1 0	0... 1⅛ 1⅜
150000	Colar,* *g,* Mysore	0 10	0... ⅛ ⅜
75000	Colombian Hydraulic, *g,* Colombia	1 0	0...
65000	Colorado United, *s-l* Colorado*†‖..	5 0	0... 1⅞ 2⅛
100000	Cootacovil,* *g,* Wynaad	1 0	0...
120000	Devala Central,* *g,* Wynaad	1 0	0... 1 1¼
200000